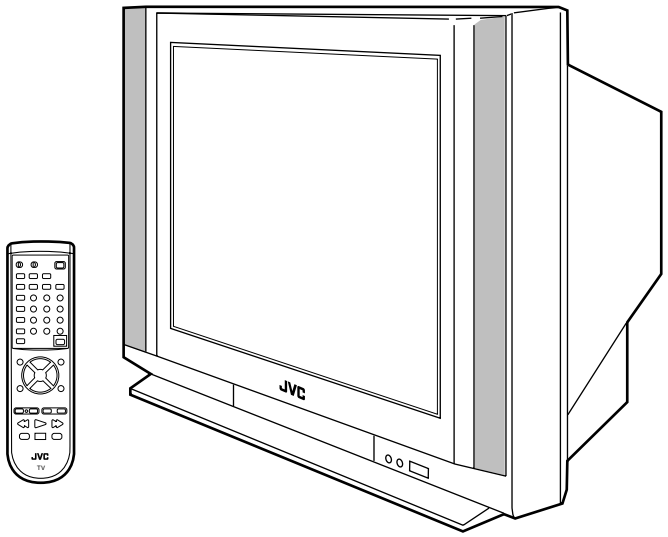
JVC

SERVICE MANUAL

COLOR TELEVISION

BASIC CHASSIS
AC

AV-27F802



CONTENTS

No. 51757
Sep. 2000

SPECIFICATIONS

Items	Contents
Dimensions (W × H × D)	29-7/8" × 23-3/8" × 19-3/4" / 75.8cm × 59.3cm × 50.0cm
Mass	101.2 lbs / 46 kg
TV RF System	CCIR(M)
Color Sound System	NTSC, BTSC System (Multi Channel Sound)
TV Receiving Channels and Frequency	
VL Band	(02~06) 54MHz~88MHz
VH Band	(07~13) 174MHz~216MHz
UHF Band	(14~69) 470MHz~806MHz
CATV Receiving Channels and Frequency	
Low Band	(02~06, A-8) by (02~06&01)
High Band	(07~13) by (07~13)
Mid Band	(A~1) by (14~22)
Super Band	(J~W) by (23~36) (54MHz~804MHz)
Hyper Band	(W+1~W+28) by (37~64)
Ultra Band	(W+29~W+84) by (65~125)
Sub Mid Band	(A8, A4~A1) by (01, 96~99)
TV/CATV Total Channel	180 Channels
Intermediate Frequency	
Video IF Carrier	45.75MHz
Sound IF Carrier	41.25MHz (4.5MHz)
Color Sub Carrier	3.58MHz
Power Input	120V AC, 60Hz
Power Consumption	140W / 2.0A
Picture Tube	27" (68cm) Measured Diagonally
High Voltage	30kV±1kV (at zero beam current)
Speaker	2" × 4-3/4" / 5 × 12cm Oval type × 2
Audio Power Output	5W × 2
Video / Audio Input (1 / 2 / 3 / 4)	Video(1,3,4) : 1Vp-p, 75Ω (RCA pin jack) Audio(1,2,3,4) : 500mVrms (-4dBs), High Impedance (RCA pin jack) S-Video (Input 1 / 3 / 4 Over) Y : 1Vp-p Positive (negative sync provided, when terminated with 75Ω) C : 0.286Vp-p (burst signal, when terminated with 75Ω) Component Input (Input 2 / 4) Y : 1Vp-p positive (negative sync provided, when terminated with 75Ω) P_B/P_R : 0.7Vp-p 75 Ω
Audio Output **(Variable / Fix : Selectable)**	Variable : More then 0~1550mVrms (+6dBs) Low impedance (400Hz when modulated 100%) (RCA pin jack) Fix : 500mVrms(-4dBs) Low impedance (400Hz when modulated 100%) (RCA pin jack)
AV Compu link EX Input	3.5mm mini jack
Antenna terminal	75Ω(VHF/UHF) Terminal, F-Type Connector
Remote Control Unit	RM-C301G-1A (AA/R6/UM-3 battery × 2)

Design & specifications are subject to change without notice.

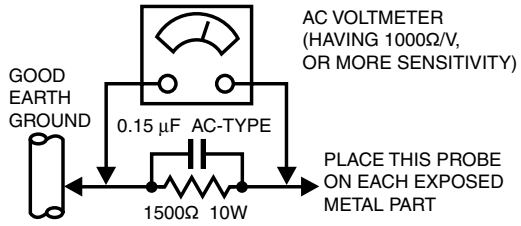
SAFETY PRECAUTIONS

1. The design of this product contains special hardware, many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the products should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. **Electrical components having such features are identified by shading on the schematics and by (⚠) on the parts list in Service manual.** The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of Service manual may cause shock, fire, or other hazards.
4. **Use isolation transformer when hot chassis.**
   The chassis and any sub-chassis contained in some products are connected to one side of the AC power line. An isolation transformer of adequate capacity should be inserted between the product and the AC power supply point while performing any service on some products when the HOT chassis is exposed.
5. **Don't short between the LIVE side ground and ISOLATED (NEUTRAL) side ground or EARTH side ground when repairing.**
   Some model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (⊥) side GND, the ISOLATED(NEUTRAL) : (⏚) side GND and EARTH : (⏚) side GND. Don't short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND and never measure with a measuring apparatus (oscilloscope etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND at the same time.
   If above note will not be kept, a fuse or any parts will be broken.
6. If any repair has been made to the chassis, it is recommended that the B1 setting should be checked or adjusted (See ADJUSTMENT OF B1 POWER SUPPLY).
7. The high voltage applied to the picture tube must conform with that specified in Service manual. Excessive high voltage can cause an increase in X-Ray emission, arcing and possible component damage, therefore operation under excessive high voltage conditions should be kept to a minimum, or should be prevented. If severe arcing occurs, remove the AC power immediately and determine the cause by visual inspection (incorrect installation, cracked or melted high voltage harness, poor soldering, etc.). To maintain the proper minimum level of soft X-Ray emission, components in the high voltage circuitry including the picture tube must be the exact replacements or alternatives approved by the manufacturer of the complete product.
8. Do not check high voltage by drawing an arc. Use a high voltage meter or a high voltage probe with a VTVM. Discharge the picture tube before attempting meter connection, by connecting a clip lead to the ground frame and connecting the other end of the lead through a 10kΩ 2W resistor to the anode button.
9. When service is required, observe the original lead dress. Extra precaution should be given to assure correct lead dress in the high voltage circuit area. Where a short circuit has occurred, those components that indicate evidence of overheating should be replaced. Always use the manufacturer's replacement components.
10. **Isolation Check**
    (Safety for Electrical Shock Hazard)
    After re-assembling the product, always perform an isolation check on the exposed metal parts of the cabinet (antenna terminals, video/audio input and output terminals, Control knobs, metal cabinet, screwheads, earphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

(1) **Dielectric Strength Test**
The isolation between the AC primary circuit and all metal parts exposed to the user, particularly any exposed metal part having a return path to the chassis should withstand a voltage of 1100V AC (r.m.s.) for a period of one second.
(. . . . Withstand a voltage of 1100V AC (r.m.s.) to an appliance rated up to 120V, and 3000V AC (r.m.s.) to an appliance rated 200V or more, for a period of one second.)
This method of test requires a test equipment not generally found in the service trade.

(2) **Leakage Current Check**
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground (water pipe, etc.). Any leakage current must not exceed 0.5mA AC (r.m.s.).
However, in tropical area, this must not exceed 0.2mA AC (r.m.s.).

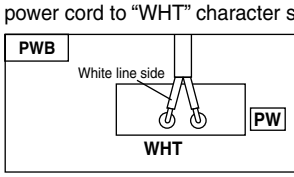
● **Alternate Check Method**
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Use an AC voltmeter having 1000 ohms per volt or more sensitivity in the following manner. Connect a 1500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground (water pipe, etc.). Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75V AC (r.m.s.). This corresponds to 0.5mA AC (r.m.s.).
However, in tropical area, this must not exceed 0.3V AC (r.m.s.). This corresponds to 0.2mA AC (r.m.s.).



11. **High voltage hold down circuit check.**
    After repair of the high voltage hold down circuit, this circuit shall be checked to operate correctly.
    See item **"How to check the high voltage hold down circuit".**

This mark shows a fast operating fuse, the letters indicated below show the rating.

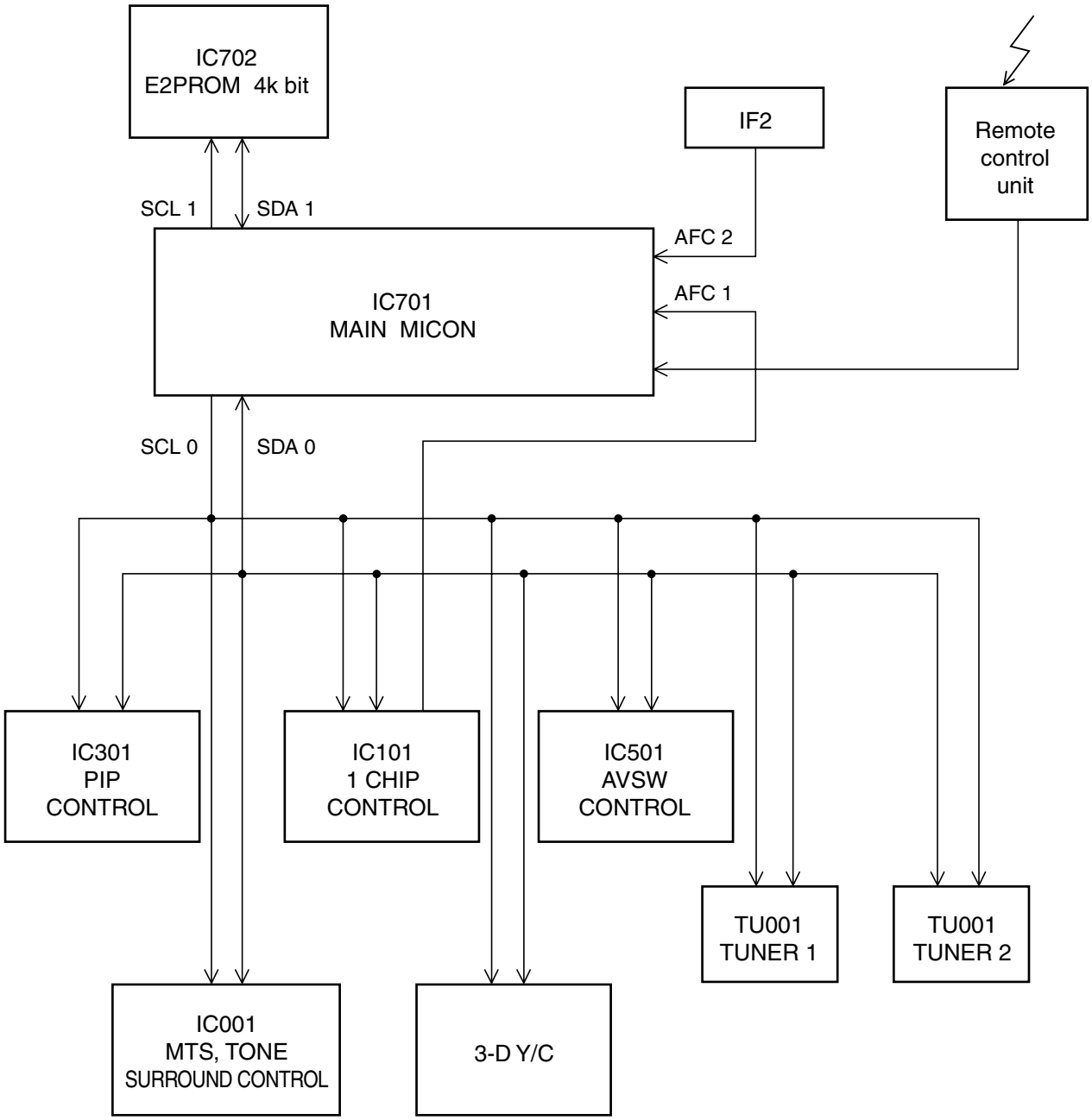
POWER CORD
REPLACEMENT WARNING
Connecting thr white line side of power cord to "WHT" character side.



FEATURES

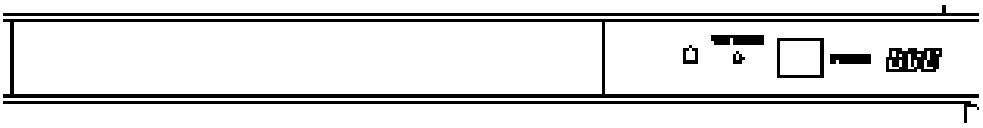
- Full-flat CRT (cathode ray tube) reproduces fine textured picture in every detail.
- I^2C bus control utilizes single chip ICs.
- Built in Twin Tuner system.
- Built-in V-CHIP system.
- Built-in HYPER-SURROUND system.
- Built-in BBE.
- Adoption of the Picture-In-Picture (PIP) function.
- 3 LINE Digital Y/C Separation circuit improved picture quality.
- Component input terminal for talking best advantage of Component Video Signal.
- Audio Video input terminal. (S-input ×2, V-input ×2)
- Variable/Fix audio output terminal.
- Closed-caption broadcasts can be viewed.
- With AV COMPU LINK EX terminal.

■ SYSTEM BLOCK DIAGRAM

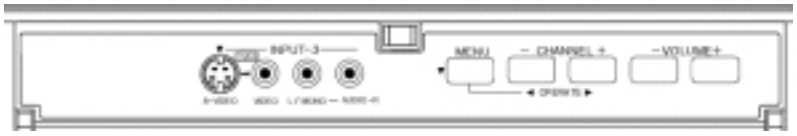


FUNCTIONS

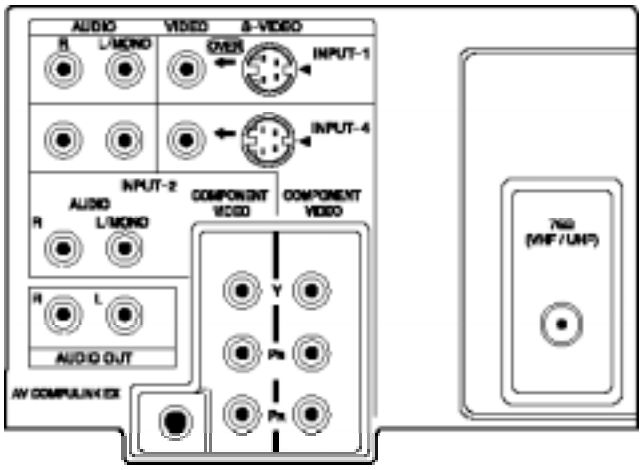
■ **FRONT PANEL**



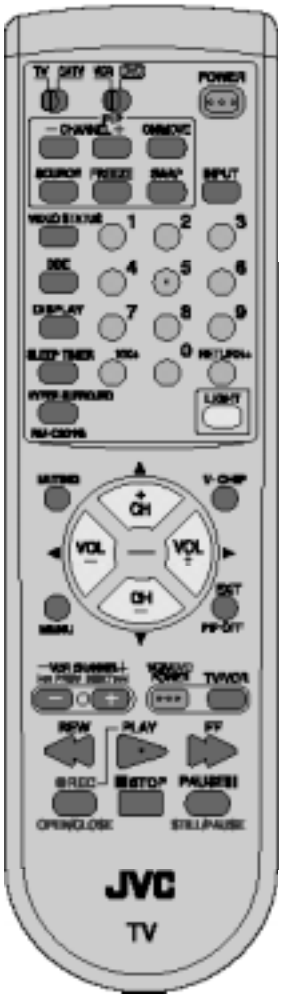
■ **FRONT PANEL DOOR OPENED**



■ **REAR PANEL**



■ **REMOTE CONTROL UNIT (RM-C301G-1A)**



SPECIFIC SERVICE INSTRUCTIONS

DISASSEMBLY PROCEDURE

REMOVING THE REAR COVER

1. Unplug the power supply cord.
2. Remove the 12 screws marked Ⓐ as shown in Fig.1.
3. Withdraw the REAR COVER toward you.

[CAUTION]

- When reinstalling the rear cover, carefully push it inward after inserting the MAIN PWB into the rear cover groove.

REMOVING THE CHASSIS

- After removing the rear cover.

1. Slightly raise the both sides of the chassis by hand and remove the 3 claws marked Ⓑ under the chassis from the front cabinet as shown in Fig.1.
2. Withdraw the chassis backward along the rail in the arrow direction marked Ⓒ as shown in Fig.1.

   (If necessary, take off the wire clamp, connector's etc.)

   * When conducting a check with power supplied, be sure to confirm that the CRT earth wire is connected to the CRT SOCKET PWB and the MAIN PWB.

REMOVING THE TERMINAL BOARD

- After removing the rear cover.

1. Remove the 6 screws marked Ⓓ as shown in Fig.1.
2. When you pull out the TERMINAL BOARD in the direction of arrow marked E as shown in Fig.1, it can be removed.

REMOVING THE FRONT AND POWER SW PW BOARDS

- After removing the rear cover and chassis.

1. Remove the 6 screws marked Ⓕ as shown in Fig.1.
2. Then remove the FRONT PWB and POWER SW PWB.

   (If necessary, take off the wire, connector's etc.)

REMOVING THE LF PW BOARD

- After removing the rear cover and chassis.

1. Lift the left side of the LF PWB while pressing the 2 PWB stoppers marked Ⓖ in the arrow direction marked Ⓗ as shown in Fig.1.
2. Then remove the LF PWB.

   (If necessary, take off the wire, connector's etc.)

REMOVING THE DAF PW BOARD

- After removing the rear cover and chassis.

1. Lift the right side of the DAF PWB while pressing the PWB stopper marked Ⓙ and claw marked Ⓚ in the arrow direction marked Ⓛ as shown in Fig.1.
2. Then remove the DAF PWB.

   (If necessary, take off the wire, connector's etc.)

REMOVING THE SPEAKER

- After removing the rear cover.

1. Remove the 2 screws marked Ⓜ as shown in Fig.1.
2. Withdraw the speaker backward.
3. Follow the same steps when removing the other hand speaker.

CHECKING THE MAIN PW BOARD

1. To check the back side of the MAIN PW Board.
   1) Pull out the chassis. (Refer to REMOVING THE CHASSIS).
   2) Erect the chassis vertically so that you can easily check the back side of the MAIN PW Board.

[CAUTION]

- When erecting the chassis, be careful so that there will be no contacting with other PW Board.
- Before turning on power, make sure that the CRT earth wire and other connectors are properly connected.

WIRE CLAMPING AND CABLE TYING

1. Be sure clamp the wire.
2. Never remove the cable tie used for tying the wires together. Should it be inadvertently removed, be sure to tie the wires with a new cable tie.

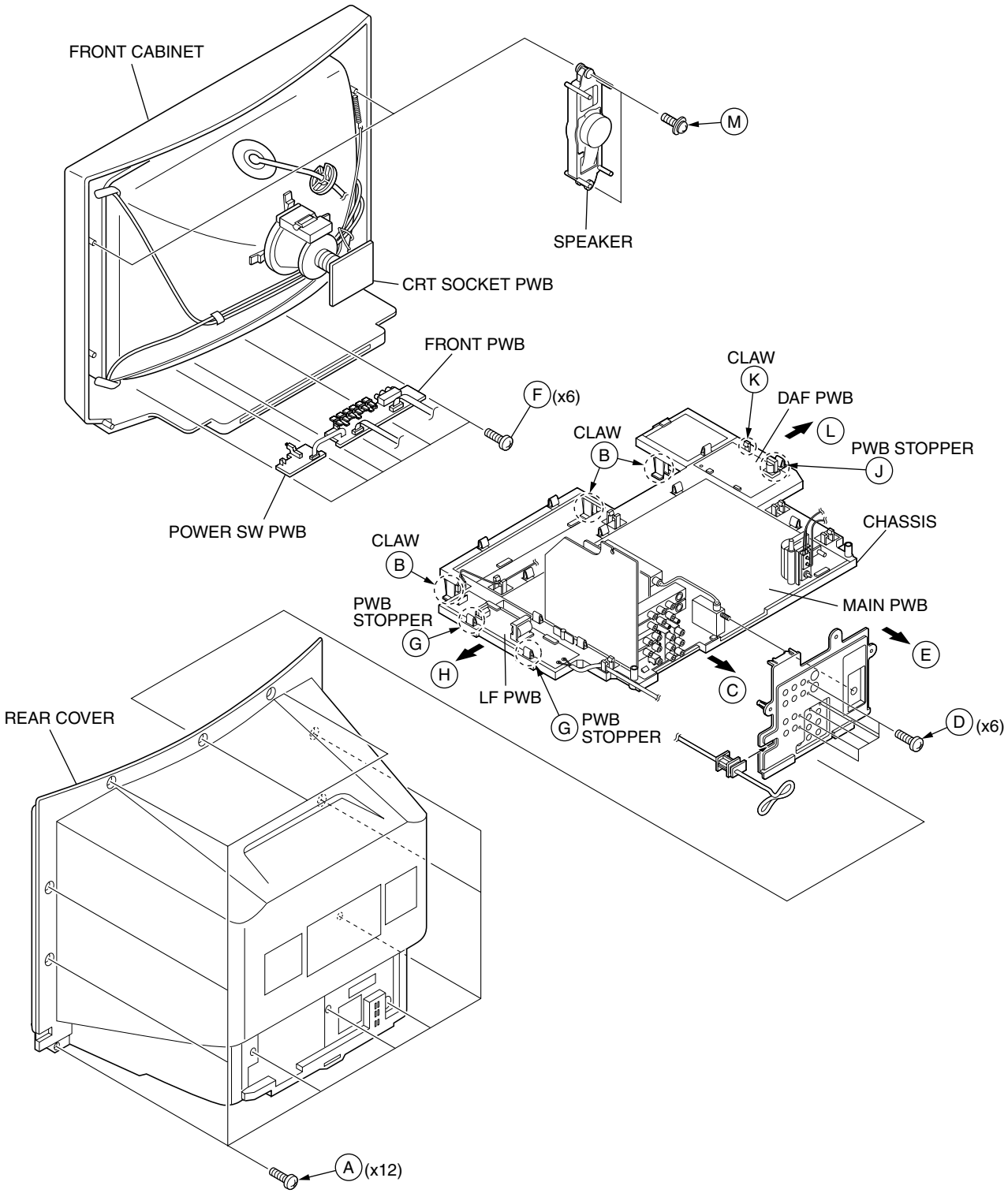

FRONT CABINET
M
SPEAKER
CRT SOCKET PWB
FRONT PWB
F (x6)
CLAW
K
DAF PWB
L
CLAW
B
PWB STOPPER
J
POWER SW PWB
CHASSIS
CLAW
B
PWB
STOPPER
G
MAIN PWB
E
H
C
LF PWB
G
PWB
STOPPER
D (x6)
REAR COVER
A (x12)

Fig.1

MEMORY IC REPLACEMENT

1. Memory IC

This model use a memory IC.
This memory IC stores data for proper operation of the video and deflection circuits.
When replacing, be sure to use an IC containing this (initial value) data.

2. Memory IC replacement procedure

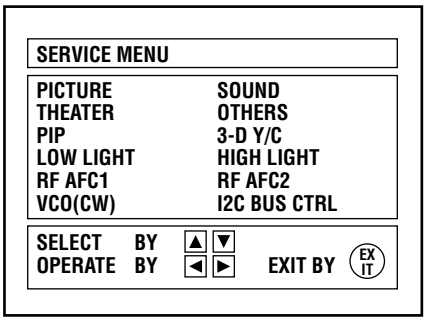
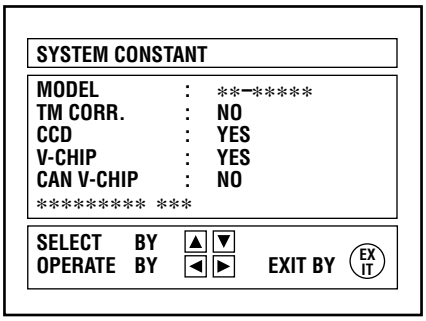
Procedure	Screen display
(1) Power off Switch off the power and disconnect the power cord from the outlet.	
(2) Replace the memory IC Initial value must be entered into the new IC.	
(3) Power on Connect the power cord to the outlet and switch on the power.	
(4) System constant check and setting 1) Press **SLEEP TIMER** key and, while the indication of "**SLEEP TIMER 0 MIN.**" is being displayed, press **DISPLAY** key and **VIDEO STATUS** key on the remote control unit simultaneously. 2) The SERVICE MENU screen of Fig.1 is displayed. 3) While the SERVICE MENU is displayed, again simultaneously press the DISPLAY and VIDEO STATUS keys to display the Fig.2 SYSTEM CONSTANT screen. 4) Refer to the SYSTEM CONSTANT table and check the setting items. Where these differ, select the setting item with the MENU UP/DOWN key and adjust the setting with the MENU LEFT/RIGHT keys. (The letters of the selected item are displayed in yellow.) 5) After adjusting, release the MENU LEFT/RIGHT key to store the setting value. 6) Press the EXIT key twice to return the normal screen.	 Fig.1  Fig.2
(5) Receive channel setting Refer to the OPERATING INSTRUCTIONS(USER'S GUIDE) and set the receive channels (Channels Preset) as described.	
(6) User settings Check the user setting items according to Table 2. Where these do not agree, refer to the OPERATING INSTRUCTIONS (USER'S GUIDE) and set the items as described.	
(7) SERVICE MENU setting Verify what to set in the SERVICE MENU, and set whatever is necessary.(Fig.1) Refer to the SERVICE ADJUSTMENT for setting.	

TABLE 1 (System Constant setting)

Setting item	Setting content	Setting value
MODEL	AV-27F802 → AV-32F802 → AV-36F802 → AV-27F702 → AV-32F702 → AV-36F702 → AV-32D502 → AV-36D502 → AV-32D302 → AV-36D302 → AV-32D202 → AV-36D202 → AV-27D502 → AV-36D602 → AV-27D602 → AV-32D602 → AV-27F802	AV-27F802
TM CORR.	YES → NO → YES	NO
CCD	YES → NO → YES	YES
V-CHIP	YES → NO → YES	YES
CAN V-CHIP	YES → NO → YES	NO

TABLE 2 (User setting value)

Setting item	Setting value
1. Use remote controller keys	
POWER	OFF
CHANNEL	CH-02
VOLUME	5
INPUT	TV
HYPER SURROUND	OFF
BBE	ON
DISPLAY	OFF
SLEEP TIMER	0
VIDEO STATUS	STANDARD
PIP SOURCE	CH-04
PIP ON (PIP POSITION)	LEFT LOWR SIDE
2. Setting of MENU	
PICTURE ADJUST	
TINT	CENTER
COLOR	CENTER
PICTURE	CENTER
BRIGHT	CENTER
DETAIL	CENTER
NOISE MUTING	ON
SET VIDEO STATUS	ALL CENTER
SOUND ADJUST	
BASS	CENTER
TREBLE	CENTER
BALANCE	CENTER
MTS	STEREO
CLOCK/TIMERS	
SET CLOCK	Unnecessary to set
ON/OFF TIMER	NO
INITIAL SETUP	
TV SPEAKER	ON
AUDIO OUT	FIX
V4 COMPONENT-IN	NO
LANGUAGE	ENG
CLOSED CAPTION	OFF
AUTO TUNER SETUP	TUNER MODE : AIR
CHANNEL SUMMARY	Unnecessary to set
V-CHIP	OFF
SET LOCK CODE	Unnecessary to set

REPLACEMENT OF CHIP COMPONENT

■ CAUTIONS

1. Avoid heating for more than 3 seconds.
2. Do not rub the electrodes and the resist parts of the pattern.
3. When removing a chip part, melt the solder adequately.
4. Do not reuse a chip part after removing it.

■ SOLDERING IRON

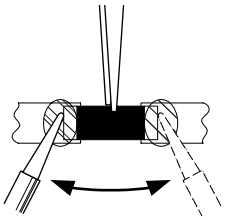
1. Use a high insulation soldering iron with a thin pointed end of it.
2. A 30w soldering iron is recommended for easily removing parts.

■ REPLACEMENT STEPS

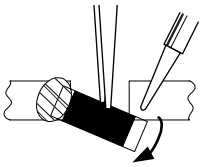
1. How to remove Chip parts

◆ **Resistors, capacitors, etc.**

(1) As shown in the figure, push the part with tweezers and alternately melt the solder at each end.

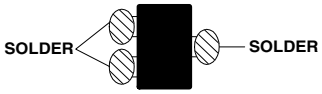


(2) Shift with tweezers and remove the chip part.

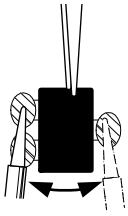


◆ **Transistors, diodes, variable resistors, etc.**

(1) Apply extra solder to each lead.



(2) As shown in the figure, push the part with tweezers and alternately melt the solder at each lead. Shift and remove the chip part.

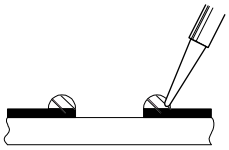


Note : After removing the part, remove remaining solder from the pattern.

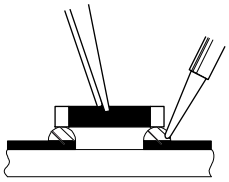
2. How to install Chip parts

◆ **Resistors, capacitors, etc.**

(1) Apply solder to the pattern as indicated in the figure.



(2) Grasp the chip part with tweezers and place it on the solder. Then heat and melt the solder at both ends of the chip part.

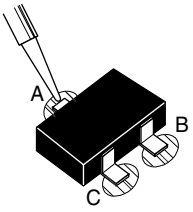


◆ **Transistors, diodes, variable resistors, etc.**

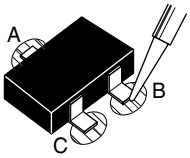
(1) Apply solder to the pattern as indicated in the figure.

(2) Grasp the chip part with tweezers and place it on the solder.

(3) First solder lead **A** as indicated in the figure.



(4) Then solder leads **B** and **C**.



SERVICE ADJUSTMENTS

ADJUSTMENT PREPARATION:

1. **You can make the necessary adjustments for this unit with either the remote control unit or with the adjustment equipment and parts as given below.**
2. **Adjustment with the remote control unit is made on the basis of the initial setting values, however, the new setting values which set the screen to its optimum condition may differ from the initial settings.**
3. Make sure that AC power is turned on correctly.
4. Turn on the power for the set and test equipment before use, and start the adjustment procedures after waiting at least 30 minutes.
5. Unless otherwise specified, prepare the most suitable reception or input signal for adjustment.
6. Never touch any adjustment parts, which are not specified in the list for this adjustment-variable resistors, transformers, capacitors, etc.
7. Presetting before adjustment.
   Unless otherwise specified in the adjustment instructions, preset the following functions with the remote control unit.

● User mode setting position

VIDEO STATUS	STANDARD
HYPER SURROUND	OFF
BASS, TREBLE, BALANCE	CENTER
TINT, COLOR, PICTURE, BRIGHT, DETAIL	CENTER

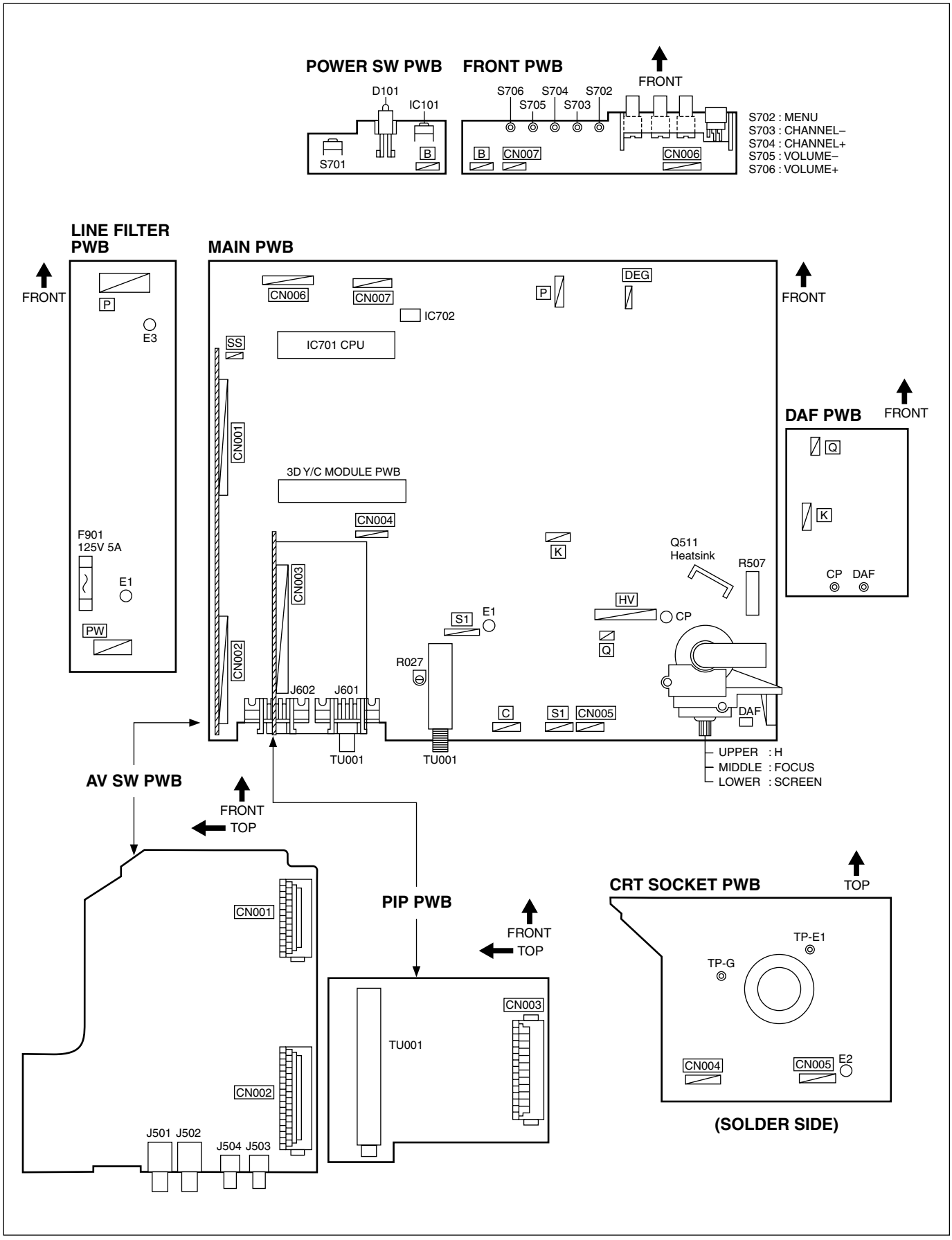
MEASURING INSTRUMENT

1. DC voltmeter(or digital voltmeter)
2. Oscilloscope
3. Signal generator (Pattern generator) [NTSC]
4. Remote control unit
5. TV audio multiplex signal generator
6. Frequency counter
7. Resistor (1MΩ)

ADJUSTMENT ITEMS

- Check of B1 POWER SUPPLY
- RF AGC adjustment
- FOCUS adjustment
- DEFLECTION adjustment
  - V.CENTER and TRAPEZIUM adjustment
  - V-SIZE and V-LINEARITY adjustment
  - H SIZE and H POSITION adjustment
  - SIDE PIN and CORNER PIN adjustment
  - PIP DISPLAY POSITION adjustment
- VIDEO / CHROMA adjustment
  - WHITE BALANCE (Low Light) adjustment
  - WHITE BALANCE (High Light) adjustment
  - SUB BRIGHT adjustment
  - SUB CONTRAST adjustment
  - SUB COLOR adjustment
  - SUB TINT adjustment
  - PIP HIGH LIGHT WHITE BALANCE Adjustment
- MTS circuit adjustment
  - INPUT LEVEL check
  - STEREO VCO adjustment
  - SAP VCO adjustment
  - FILTER check
  - SEPARATION adjustment

ADJUSTMENT LOCATIONS



BASIC OPERATION OF SERVICE MENU

1. TOOL OF SERVICE MENU OPERATION

Operate the SERVICE MENU with the REMOTE CONTROL UNIT.

2. SERVICE MENU ITEMS

In general, basic setting (adjustments) items or verifications are performed in the SERVICE MENU.

- PICTURE ..... This sets the setting values (adjustment values) of the VIDEO/CHROMA and DEFLECTION circuits.
- SOUND ..... This sets the setting values (adjustment values) of the AUDIO circuit.
- THEATER ..... This is used when the THEATER MODE is adjusted.
- OTHERS ..... This is used when the OTHERS MODE is adjustment.
- PIP ..... This sets the setting values (adjustment values) of the PIP circuit.
- 3-D Y/C ..... This sets the setting values (adjustment values) of the 3-D Y/C circuit.
- LOW LIGHT ..... This sets the setting values (adjustment values) of the WHITE BALANCE circuit.
- HIGH LIGHT ..... This sets the setting values (adjustment values) of the WHITE BALANCE circuit.
- RF AFC1 ..... This is used when the RF AFC1 MODE is verified. **[Do not adjust]**
- RF AFC2 ..... This is used when the RF AFC2 MODE is verified. **[Do not adjust]**
- VCO (CW) ..... This is not used for AV-27F802.
- I2C BUS CTRL ..... This is used when ON/OFF of the I2C BUS CTRL is set. **[Fixed ON]**

3. Basic Operations of the SERVICE MENU

(1) How to enter the SERVICE MENU.

Press **SLEEP TIMER** key and, while the indication of **"SLEEP TIMER 0 MIN."** is being displayed, press **DISPLAY** key and **VIDEO STATUS** key on the remote control unit simultaneously to enter the **SERVICE MENU** screen ① shown in the next figure page.

(2) SERVICE MENU screen selection

Press the UP / DOWN key of the MENU to select any of the following items.
(The letters of the selected items are displayed in yellow.)

- PICTURE
- SOUND
- THEATER
- OTHERS
- PIP
- 3-D Y/C
- LOW LIGHT
- HIGH LIGHT
- RF AFC1
- RF AFC2
- VCO(CW)
- I2C BUS CTRL

(3) Enter the any setting (adjustment) mode

- **PICTURE, SOUND, OTHERS and 3-D Y/C mode**

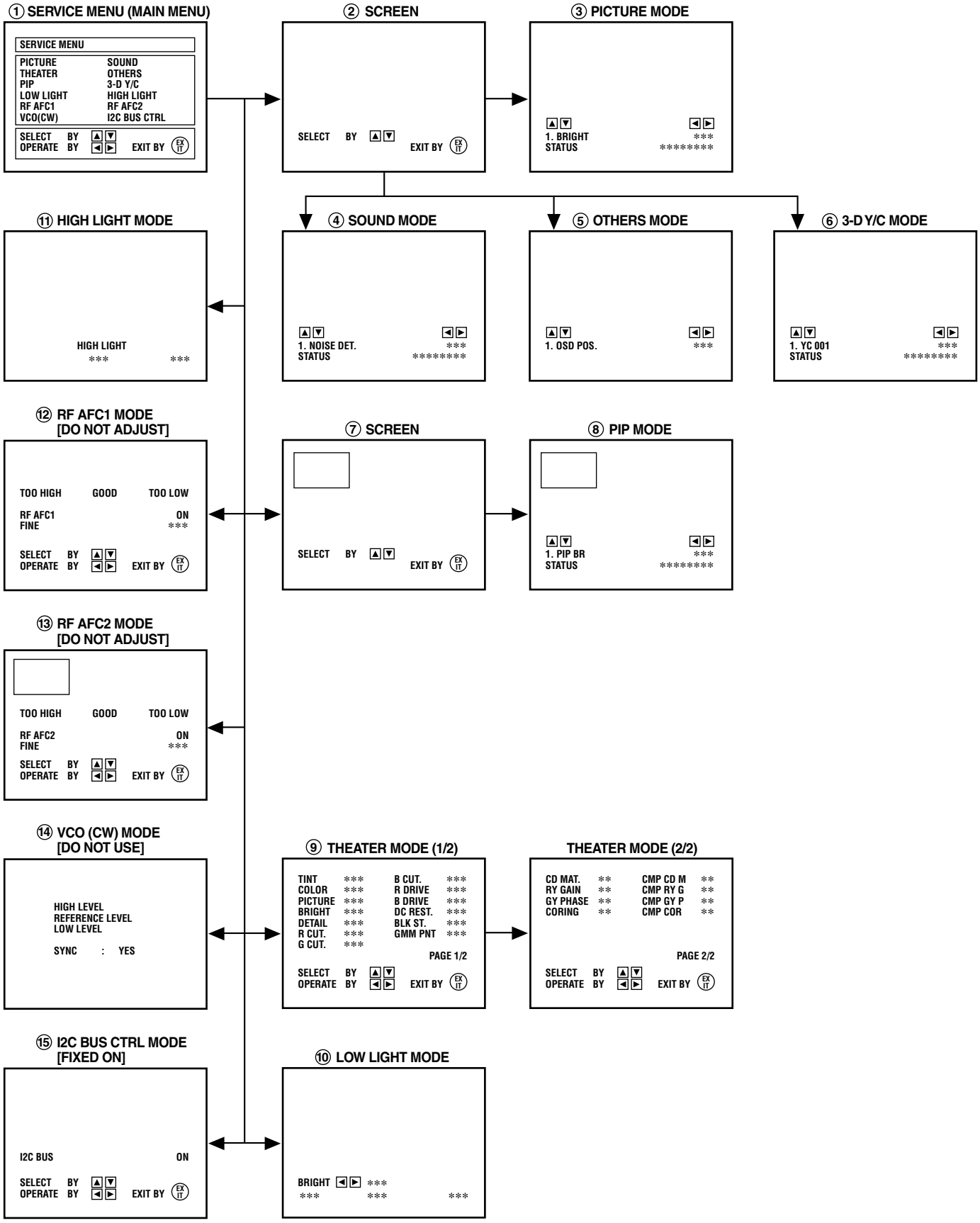
1) If select any of PICTURE, SOUND, OTHERS or 3-D Y/C items, and the LEFT / RIGHT key is pressed from SERVICE MENU (MAIN MENU), the screen ② will be displayed as shown in figure page later.
2) Then the UP / DOWN key is pressed, the PICTURE mode screen ③ or the SOUND mode screen ④ or the OTHER mode screen ⑤ or the 3-D Y/C mode screen ⑥ is displayed, and the PICTURE, SOUND, OTHERS or 3-D Y/C setting can be performed.

- **PIP mode**

1) If select the PIP item, and the LEFT/RIGHT key is pressed from SERVICE MENU (MAIN MENU), the screen ⑦ will be displayed as shown in figure page later.
2) Then the UP/DOWN key is pressed, the PIP mode screen ⑧ is displayed, and the PIP setting can be performed.

- **THEATER, LOW LIGHT, HIGH LIGHT, RF AFC1, RF AFC2, VCO(CW) and I2C BUS CTRL mode**

1) If select any of THEATER / LOW LIGHT / HIGH LIGHT / RF AFC1 / RF AFC2 / VCO (CW) / I2C BUS CTRL items, and the LEFT / RIGHT key is pressed from SERVICE MENU (MAIN MENU), the screens ⑨ ⑩ ⑪ ⑫ ⑬ ⑭ ⑮ will be displayed as shown in figure page later.
2) Then the settings or verifications can be performed.

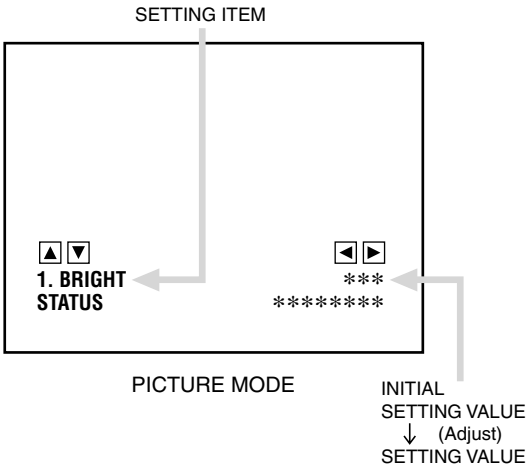

① SERVICE MENU (MAIN MENU)
SERVICE MENU
PICTURE SOUND
THEATER OTHERS
PIP 3-D Y/C
LOW LIGHT HIGH LIGHT
RF AFC1 RF AFC2
VCO(CW) I2C BUS CTRL
SELECT BY
OPERATE BY
EXIT BY
② SCREEN
SELECT BY
EXIT BY
③ PICTURE MODE
1. BRIGHT ***
STATUS ********
④ SOUND MODE
1. NOISE DET. ***
STATUS ********
⑤ OTHERS MODE
1. OSD POS. ***
⑥ 3-D Y/C MODE
1. YC 001 ***
STATUS ********
⑪ HIGH LIGHT MODE
HIGH LIGHT
*** ***
⑫ RF AFC1 MODE
[DO NOT ADJUST]
TOO HIGH GOOD TOO LOW
RF AFC1 ON
FINE ***
SELECT BY
OPERATE BY
EXIT BY
⑦ SCREEN
SELECT BY
EXIT BY
⑧ PIP MODE
1. PIP BR ***
STATUS ********
⑬ RF AFC2 MODE
[DO NOT ADJUST]
TOO HIGH GOOD TOO LOW
RF AFC2 ON
FINE ***
SELECT BY
OPERATE BY
EXIT BY
⑭ VCO (CW) MODE
[DO NOT USE]
HIGH LEVEL
REFERENCE LEVEL
LOW LEVEL
SYNC : YES
⑨ THEATER MODE (1/2)
TINT *** B CUT. ***
COLOR *** R DRIVE ***
PICTURE *** B DRIVE ***
BRIGHT *** DC REST. ***
DETAIL *** BLK ST. ***
R CUT. *** GMM PNT ***
G CUT. ***
PAGE 1/2
SELECT BY
OPERATE BY
EXIT BY
THEATER MODE (2/2)
CD MAT. ** CMP CD M **
RY GAIN ** CMP RY G **
GY PHASE ** CMP GY P **
CORING ** CMP COR **
PAGE 2/2
SELECT BY
OPERATE BY
EXIT BY
⑮ I2C BUS CTRL MODE
[FIXED ON]
I2C BUS ON
SELECT BY
OPERATE BY
EXIT BY
⑩ LOW LIGHT MODE
BRIGHT ***
*** *** ***

(4) Setting method

1) UP / DOWN key of the MENU
   Select the SETTING ITEM.

2) LEFT / RIGHT key of the MENU
   Setting (adjust) the SETTING VALUE of the SETTING ITEM.
   When the key is released the SETTING VALUE will be stored (memorized).

3) EXIT key
   Returns to the previous screen.



(5) Releasing SERVICE MENU

1) After returning to the SERVICE MENU upon completion of the setting (adjustment) work, press the EXIT key again.

★ The settings for LOW LIGHT and HIGH LIGHT are described in the WHITE BALANCE page of ADJUSTMENT.

INITIAL SETTING VALUE OF SERVICE MENU

1. **Adjustment of the SERVICE MENU is made on the basis of the initial setting values; however, the new setting values which set the screen in its optimum condition may differ from the initial setting.**
2. **Do not change the initial setting values of the setting (Adjustment) items not listed in "ADJUSTMENT".**

● PICTURE MODE

☆ The four setting items in the video mode No.6 EXT BRI., No.7 EXT PIC., No.8 EXT COL. and No.9 EXT TINT are linked to the items in the TV MODE No.1 BRIGHT, No.2 PICTURE, No.3 COLOR and No.4 TINT, respectively. When the setting items in the TV mode are adjusted, the values in the setting items in the video mode are revised automatically to the same values in the TV mode.(The initial setting values given in ( ) are off-set values.)

☆ When the four items (No.6, 7, 8 and 9) are adjusted in the video mode, the setting values in each item are revised independently.

No.	Setting (Adjustment) item	Variable range	Initial setting value
1	BRIGHT	000 ~ 127	063
2	PICTURE	000 ~ 127	060
3	COLOR	000 ~ 127	072
4	TINT	000 ~ 127	059
5	TV DETAIL	000 ~ 063	050
6	EXT BRIGHT	±025	(–001)
7	EXT PICT.	±025	(±000)
8	EXT COLOR	±025	(±000)
9	EXT TINT	±025	(–007)
10	EXT DETAIL	000 ~ 063	050
11	CMP BRIGHT	±025	+003
12	CMP PICT.	±025	±000
13	CMP COLOR	000 ~ 127	088
14	CMP TINT	000 ~ 127	053
15	CMP DETAIL	000 ~ 063	050
16	CMP R CUT	±025	±000
17	CMP G CUT	±025	±000
18	CMP B CUT	±025	±000
19	CMP R DRV	±025	±000
20	CMP B DRV	±025	±000
21	WPL	000 / 001	001
22	B. B. SW	000 / 001	000
23	C TRAP	000 / 001	000
24	CORING	000 / 001	000
25	CMP CORING	000 / 001	001
26	TV SHARPF	000 / 001	001
27	EXT SHARPF	000 / 001	001
28	CMP SHARPF	000 / 001	001
29	RGB CONT	000 ~ 063	028
30	TV ID SEN S	000 / 001	000
31	EXT ID SEN	000 / 001	000
32	F ID	000 / 001	000
33	Y MUTE	000 / 001	000
34	AUDIO ATT	000 ~ 127	127
35	SUB CONT	000 ~ 015	008

No.	Setting (Adjustment) item	Variable range	Initial setting value
36	R Y GAIN	000 / 001	001
37	CMP R Y GA	000 / 001	001
38	G Y PHASE	000 / 001	001
39	CMP G Y PH	000 / 001	000
40	CD MATRIX	000 ~ 003	002
41	CMP CD MAT	000 ~ 003	003
42	BLACK ST	000 ~ 003	001
43	DC REST	000 ~ 003	001
44	COLOR GMM	000 / 001	000
45	UV/CBCR	000 / 001	000
46	AT FLESH	000 / 001	000
47	ABL GAIN	000 ~ 003	000
48	ABL ST PNT	000 ~ 003	003
49	RGB ABCL	000 / 001	001
50	TV BPF TOF	000 / 001	001
51	EXT BPF TOF	000 / 001	001
52	GMM PNT	000 ~ 003	003
53	SVM GAIN	000 ~ 003	002
54	CMP SVM GA	000 ~ 003	002
55	SVM PHASE	000 / 001	000
56	AUDIO SW	000 / 001	000
57	BUZZ	000 / 001	000
58	IF FREQ	000 / 001	000
59	RF AGC	000 ~ 063	045
60	AFT MUTE	000 / 001	000
61	AFT SENS	000 / 001	000
62	R/G DRV SW	000 / 001	001
63	BLK SW	000 / 001	000
64	V S COR	000 ~ 015	012
65	V LIN	000 ~ 015	010
66	V SIZE	000 ~ 127	063
67	V AGC	000 / 001	000
68	V CENTER	000 ~ 063	035
69	TV AFC	000 ~ 003	002
70	EXT AFC	000 ~ 003	002
71	V POSI	000 ~ 007	000
72	H POSI	000 ~ 031	024
73	H SIZE	000 ~ 063	023
74	TV V FREQ	000 ~ 003	000
75	EXT V FREQ	000 ~ 003	000
76	SIDE PIN	000 ~ 063	020
77	STAND BY	000 / 001	000
78	TRAPEZ	000 ~ 063	038
79	V RAMP REF	000 / 001	001
80	V 48HZ	000 / 001	000
81	V EHT	000 ~ 007	000
82	TOP PIN	000 ~ 031	015

No.	Setting (Adjustment) item	Variable range	Initial setting value
83	H EHT	000 ~ 007	000
84	BTM PIN	000 ~ 031	012
85	V BLK LOW	000 ~ 003	000
86	V BLK UP	000 ~ 003	003
87	CAPTION IN	000 / 001	000
88	H BLK	000 / 001	000
89	SCREEN	000 / 001	000
90	ACB SW	000 / 001	000
91	ACB PULSE	000 ~ 015	007
92	OVER MODU	000 / 001	001
93	CB/CR FIL	000 / 001	001
94	TEST	000 ~ 255	128
95	RF S/N TY	000 ~ 002	000
96	EXT S/N TY	000 ~ 002	000
97	RF SN YC E	000 ~ 255	000
98	RF SN YC F	000 ~ 255	000
99	RF SN YC G	000 ~ 063	000
100	RF SN YC H	000 ~ 255	000
101	EX SN YC E	000 ~ 255	000
102	EX SN YC F	000 ~ 255	000
103	EX SN YC G	000 ~ 063	000
104	EX SN YC H	000 ~ 255	000
105	RF SN VC 1	000 ~ 063	000
106	RF SN VC 2	000 ~ 063	000
107	RF SN VC 3	000 ~ 063	000
108	RF SN VC 4	000 ~ 063	000
109	EX SN VC 1	000 ~ 063	000
110	EX SN VC 2	000 ~ 063	000
111	EX SN VC 3	000 ~ 063	000
112	EX SN VC 4	000 ~ 063	000
113	COR LEVEL	000 ~ 003	000
114	VNR CHK	000 ~ 255	000
115	YC SN TIME	000 ~ 255	000
116	VC SN TIME	000 ~ 255	000
117	VM DATA A	±127	±000
118	VM DATA B	±127	±000
119	VM DATA C	±127	±000
120	VM DATA D	000 / 001	000
121	VC SN STOP	000 ~ 255	000

● SOUND MODE

No.	Setting (Adjustment) item	Variable range	Initial setting value
1	NOISE DET.	000 / 001	001
2	IN LEVEL	000 ~ 063	025
3	FH MONITOR	000 / 001	000
4	STEREO VCO	000 ~ 063	030
5	PILOT CAN.	000 / 001	000
6	FILTER	000 ~ 063	030
7	LOW SEP.	000 ~ 063	028
8	HI SEP.	000 ~ 063	025
9	5FH MON.	000 / 001	000
10	SAP VCO	000 ~ 063	003
11	IN GAIN	000 / 001	000
12	FIL. OFFSET	±010	±000
13	BBE BASS	±010	–001
14	BBE TRE	±010	–001

● THEATER MODE

Setting (Adjustment) item	Variable range	Initial setting value
TINT	±20	–06
COLOR	±20	±00
PICTURE	±50	–15
BRIGHT	±20	±00
DETAIL	±20	±00
R CUT.	±20	±00
G CUT.	±20	±00
B CUT.	±20	±00
R DRIVE	±99	+09
B DRIVE	±99	–15
DC REST.	00 ~ 03	01
BLK ST.	00 ~ 03	00
GMM PNT	00 ~ 03	01
CD MATRIX	00 ~ 03	01
RY GAIN	00 / 01	01
GY PHASE	00 / 01	00
CORING	00 / 01	01
CMP CD M	00 ~ 03	00
CMP RY G	00 / 01	00
CMP GY P	00 / 01	01
CMP COR	00 / 01	01

● OTHERS MODE

No.	Setting (Adjustment) item	Variable range	Initial setting value
1	OSD POS.	000 ~ 007	002
2	CCD POS.	000 ~ 015	003
3	EOSEL	000 / 001	001
4	MENU COLOR	000 ~ –030	–010
5	MENU PICT.	000 ~ –030	–010
6	MENU BRI.	000 ~ –030	–010

● PIP MODE

No.	Setting (Adjustment) item	Variable range	Initial setting value
1	PIP BR	000 ~ 015	003
2	PIP PICT	000 ~ 075	040
3	PIP TINT	000 ~ 063	035
4	PIP COL	000 ~ 015	009
5	P R CUT	000 ~ 015	003
6	P G CUT	000 ~ 015	000
7	P B CUT	000 ~ 015	002
8	P R DR	000 ~ 255	052
9	P G DR	000 ~ 255	055
10	P B DR	000 ~ 255	060
11	LEFT POS.	000 ~ 255	019
12	RIGHT POS.	000 ~ 255	020
13	UPPER POS.	000 ~ 127	012
14	LOWER POS.	000 ~ 127	011
15	PICT LOCK	000 / 001	001
16	SELDEL	000 ~ 015	000
17	AGCFIX	000 / 001	001
18	AGCADST	000 / 001	000
19	AGC	000 ~ 015	007
20	VSPDEL	000 ~ 031	000
21	VSPISQ	000 / 001	001
22	YCOR	000 / 001	001
23	XFREQF	000 / 001	001
24	WTCHDG	000 / 001	001
25	COLON	000 / 001	000
26	ACQNEW	000 / 001	000
27	DSTDET	000 / 001	001
28	CRIBEOK	000 / 001	000
29	FCBEOK	000 / 001	000
30	NOCRID	000 / 001	000
31	NONSED	000 / 001	000

● 3-D Y/C MODE

No.	Setting (Adjustment) item	Variable range	Initial setting value
1	YC 001	000 ~ 003	001
2	YC 002	000 ~ 003	001
3	YC 003	000 ~ 003	001
4	YC 004	000 ~ 003	000
5	YC 005	000 ~ 003	000
6	YC 006	000 ~ 003	000
7	YC 007	000 ~ 003	003
8	YC 008	000 ~ 003	000
9	YC 009	000 ~ 003	001
10	YC 010	000 ~ 003	000
11	YC 011	000 ~ 007	004
12	YC 012	000 ~ 007	002
13	YC 013	000 ~ 015	002
14	YC 014	000 ~ 015	010
15	YC 015	000 ~ 015	002
16	YC 016	000 ~ 015	004
17	YC 017	000 / 001	000
18	YC 018	000 / 001	000
19	YC 019	000 ~ 003	002
20	YC 020	000 / 001	000
21	YC 021	000 / 001	000
22	YC 022	000 ~ 003	002
23	YC 023	000 / 001	000
24	YC 024	000 / 001	000
25	YC 025	000 / 001	000
26	YC 026	000 ~ 003	000
27	YC 027	000 ~ 003	001
28	YC 028 N/A	000 ~ 003	001
29	YC 029	000 ~ 003	001
30	YC 030	000 ~ 003	001
31	YC 031	000 ~ 003	002
32	YC 032	000 / 001	000
33	YC 033	000 ~ 007	000
34	YC 034	000 ~ 015	000
35	YC 035	000 ~ 007	002
36	YC 036	000 ~ 031	015
37	YC 037	000 ~ 003	000
38	YC 038	000 ~ 015	010
39	YC 039	000 ~ 003	001
40	YC 040	000 ~ 003	001
41	YC 041	000 / 001	000
42	YC 042	000 / 001	000
43	YC 043	000 / 001	000
44	YC 044	000 / 001	001
45	YC 045	000 ~ 015	003
46	YC 046	000 ~ 015	012
47	YC 047	000 ~ 015	008

No.	Setting (Adjustment) item	Variable range	Initial setting value
48	YC 048	000 ~ 015	004
49	YC 049	000 ~ 015	010
50	YC 050	000 / 001	001
51	YC 051	000 / 001	001
52	YC 052	000 ~ 003	000
53	YC 053	000 / 001	000
54	YC 054	000 / 001	001
55	YC 055	000 / 001	001
56	YC 056	000 / 001	001
57	YC 057	000 ~ 015	000
58	YC 058	000 / 001	000
59	YC 059	000 / 001	001
60	YC 060	000 ~ 003	000
61	YC 061	000 ~ 015	000
62	YC 062 DBL	000 ~ 007	002
63	YC 063 N/A	000 ~ 015	002
64	YC 064 N/A	000 ~ 015	004
65	YC 065 N/A	000 ~ 015	002
66	YC 066 N/A	000 ~ 015	004
67	YC 067	000 / 001	000
68	YC 068	000 / 001	000
69	YC 069	000 / 001	000
70	YC 070 FIX	000 ~ 003	000
71	YC 071	000 / 001	000
72	YC 072	000 / 001	000
73	YC 073	000 / 001	001
74	YC 074 FIX	000 / 001	000
75	YC 075 FIX	000 / 001	000
76	YC 076	000 / 001	001
77	YC 077 FIX	000 / 001	000
78	YC 078 FIX	000 / 001	000
79	YC 079 FIX	000 ~ 007	005
80	YC 080 FIX	000 ~ 015	000
81	YC 081 FIX	000 ~ 015	008
82	YC 082 FIX	000 ~ 015	004
83	YC 083 FIX	000 ~ 015	004
84	YC 084 DBL	000 ~ 255	112
85	YC 085 DBL	000 ~ 255	008
86	YC 086	000 / 001	001
87	YC 087	000 ~ 003	003
88	YC 088	000 / 001	001
89	YC 089	000 / 001	000
90	YC 090	000 / 001	000
91	YC 091	000 / 001	000
92	YC 092 N/A	000 / 001	000
93	YC 093 N/A	000 / 001	000
94	YC 094 DBL	000 ~ 003	001

No.	Setting (Adjustment) item	Variable range	Initial setting value
95	YC 095 DBL	000 / 001	001
96	YC 096 DBL	000 / 001	001
97	YC 097 DBL	000 / 001	000
98	YC 098 DBL	000 / 001	000
99	YC 099 DBL	000 ~ 003	000
100	YC 100 DBL	000 ~ 003	000
101	YC 101 DBL	000 / 001	000
102	YC 102 DBL	000 / 001	000
103	YC 103 DBL	000 / 001	001
104	YC 104 DBL	000 / 001	000
105	YC 105 DBL	000 / 001	000
106	YC 106 DBL	000 / 001	000
107	YC 107 DBL	000 ~ 007	002
108	3-D Y/C	000 / 001	001

● LOW LIGHT MODE

Setting (Adjustment) item	Variable range	Initial setting value
R CUTOFF	0 ~ 255	85
G CUTOFF	0 ~ 255	85
B CUTOFF	0 ~ 255	85

● HIGH LIGHT MODE

Setting (Adjustment) item	Variable range	Initial setting value
R DRIVE	0 ~ 127	60
B DRIVE	0 ~ 127	60

● RF AFC1 MODE

Setting (Adjustment) item	Variable range	Initial setting value
RF AFC1	ON / OFF	ON (DO NOT ADJUST)
FINE	-77 ~ +77	±××

● RF AFC2 MODE

Setting (Adjustment) item	Variable range	Initial setting value
RF AFC2	ON / OFF	ON (DO NOT ADJUST)
FINE	-77 ~ +77	±××

● I2C BUS CTRL MODE

Setting (Adjustment) item	Variable range	Initial setting value
I2C BUS	ON/OFF	[FIXED ON] (DO NOT ADJUST)

ADJUSTMENTS

B1 POWER SUPPLY

Item	Measuring instrument	Test point	Adjustment part	Description
Check of B1 POWER SUPPLY	**DC Voltmeter**	**R507 C504 side (B1)** **Q511 heatsink (⏚)**		1. Receive a black-and-white signal. 2. Connect the DC Voltmeter to R507 C504 side (B1) and Q511 heatsink (⏚). 3. Confirm that the voltage is DC134V $^{+2V}_{-2V}$.

ADJUSTMENT OF RF AGC

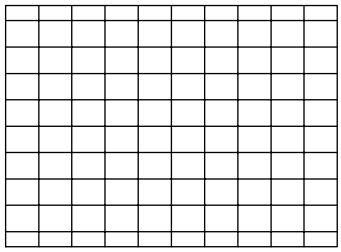
Item	Measuring instrument	Test point	Adjustment part	Description
RF AGC adjustment			**No.59 RF AGC**	1. Receive a broadcast. 2. Select the No.19 RF AGC of the PICTURE MODE. 3. Press the MUTE key of the remote control unit and turn off color. 4. With the LEFT key of the remote control unit, get noise in the screen picture. (0 side of setting value) 5. Press the RIGHT key of the remote control unit and stop when noise disappears from the screen. 6. Change to other channels and make sure that there Is no irregularity. 7. Press the MUTE key and get color out.

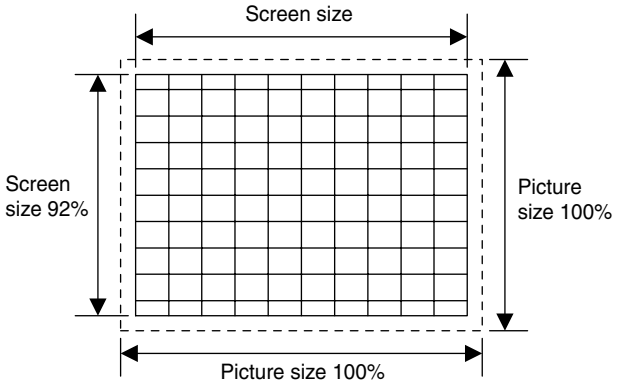
ADJUSTMENT OF FOCUS

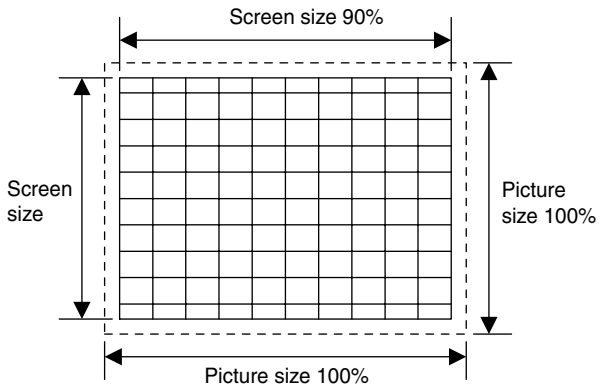
Item	Measuring instrument	Test point	Adjustment part	Description
FOCUS adjustment	**Signal generator**		**FOCUS VR [In HVT]** **H VR [In HVT]**	1. Receive a crosshatch signal. 2. While looking at the screen center, adjust the FOCUS VR so that the horizontal lines will be clear and in fine detail. 3. Adjust the H VR so that the vertical lines will be clear and in fine detail. 4. Make sure that the picture is in focus even when the screen gets darkened. **Note:** The final adjustment of convergence must be done after the FOCUS adjustment. (Convergence is changed by FOCUS adjustment.)

ADJUSTMENT OF DEFLECTION CIRCUIT

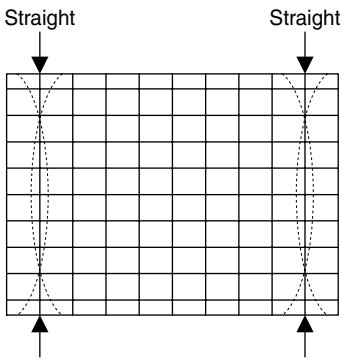
Item	Measuring instrument	Test point	Adjustment part	Description
V CENTER and TRAPEZIUM Adjustment	**Signal generator**		**No.68 V CENTER** **No.78 TRAPEZ**	1. Receive a crosshatch signal. 2. Adjust the No.68 V CENTER of the PICTURE MODE to be the same between the CRT vertical center and crosshatch vertical center. 3. Adjust the No.78 TRAPEZ of the PICTUER MODE to be the vertical lines straight. 4. Confirm the vertical lines to be straight. If it is not straight, adjust to be straight at the No.78 TRAPEZ.
V-SIZE and V-LINEARITY Adjustment	**Signal generator**		**No.66 V SIZE** **No.65 V LIN**	1. Receive a crosshatch signal. 2. Select the No.66 V SIZE of the PICTURE MODE to squeeze the laster. 3. Adjust the No.65 V LIN of the PICTURE MODE to be symmetrical. 4. Adjust the No.66 V SIZE until the vertical screen size is 92%.
H SIZE and H POSITION Adjustment	**Signal generator**		**No.73 H SIZE** **No.72 H POSI**	1. Receive a crosshatch signal. 2. Select the No.73 H SIZE of the PICTURE MODE. 3. Set the initial setting value of the No.73 H SIZE with the LEFT / RIGHT key of the remote control unit. 4. Adjust the No.73 H SIZE until the horizontal screen size is 90%. 5. Adjust the No.72 H POSI until the screen will be horizontally centered.

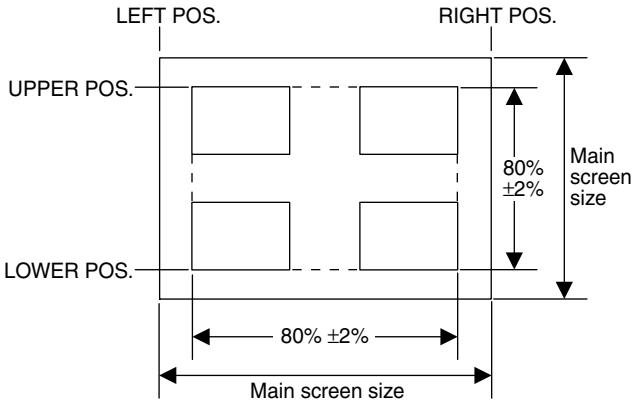






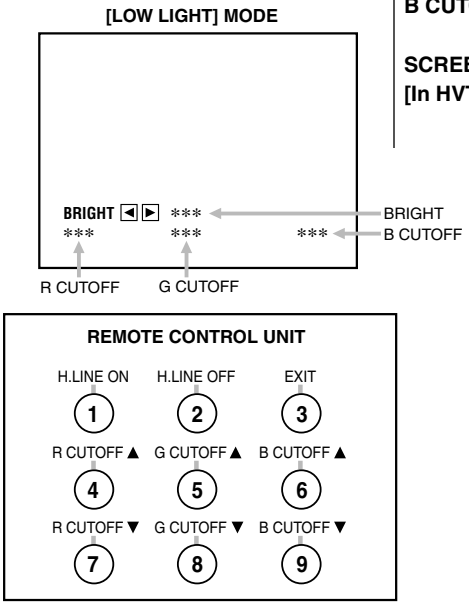
Item	Measuring instrument	Test point	Adjustment part	Description
SIDE PIN and CORNER PIN Adjsutment	**Signal generator**		**No.76 SIDE PIN** **No.82 TOP PIN** **No.84 BTM PIN**	1. Receive a crosshatch signal. 2. Adjust such that vertical 2nd lines from left and right to be straight at the No.76 SIDE PIN of the PICTURE MODE. 3. Adjust the end of vertical 2nd lines from left and right to be straight at the No.82 TOP PIN and the No.84 BTM PIN of the PICTURE MODE.
PIP DISPLAY POSITION Adjustment			**No.11 LEFT POS.** **No.12 RIGHT POS.** **No.13 UPPER POS.** **No.14 LOWER POS.**	1. Receive a broadcast. 2. Select the PIP MODE from the SERVICE MENU. 3. Then adjust the PIP screen size so that it occupies 80% ± 2% of the main screen area.

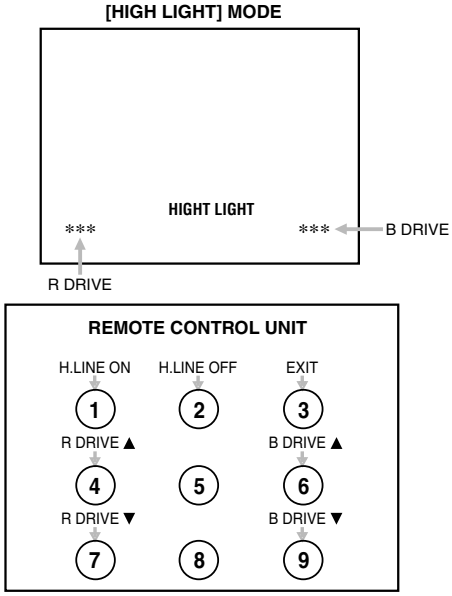




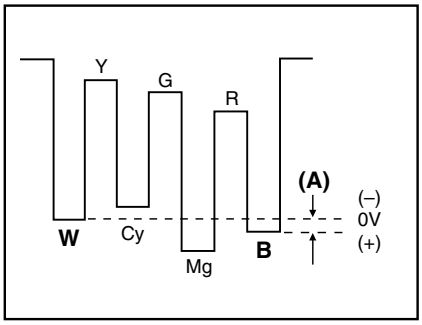
ADJUSTMENT OF VIDEO/CHROMA CIRCUIT

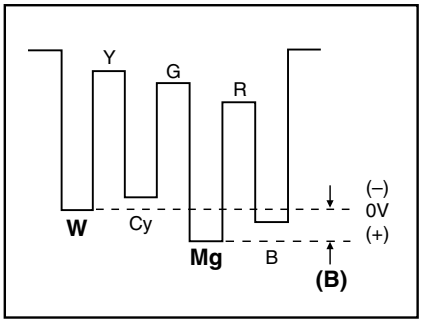
Item	Measuring instrument	Test point	Adjustment part	Description
WHITE BALANCE (Low Light) Adjustment	**Signal generator**		**BRIGHT** **R CUTOFF** **G CUTOFF** **B CUTOFF** **SCREEN VR [In HVT]**	1. Receive a black-and-white signal.(Color off) 2. Select the [LOW LIGHT] MODE from the SERVICE MENU. 3. Set the initial setting value of BRIGHT is 063 with the LEFT / RIGHT key of the remote control unit. 4. Set the initial setting value of R CUTOFF, G CUTOFF and B CUTOFF is 085 with the ④ to ⑨ key of the remote control unit. 5. Display a single horizontal line by pressing the ① key of the remote control unit. 6. Turn the screen VR all the way to the left. 7. Turn the screen VR gradually to the right from the left until either one of the red, blue or green colors appears faintly. 8. Adjust the two colors which did not appear until the single horizontal line that is displayed becomes white using the ④ to ⑨ keys of the remote control unit. 9. Turn the screen VR to where the single horizontal line glows faintly. 10. Press the ② key to return to the regular screen. * The ③ EXIT key is the cancel key for the WHITE BALANCE.
WHITE BALANCE (High Light) Adjustment	**Signal generator**		**R DRIVE** **B DRIVE**	1. Receive a black-and-white signal. (Color off) 2. Select the [HIGH LIGHT] MODE from the SERVICE MENU. 3. Set the initial setting value of R DRIVE and B DRIVE is 060 with the ④, ⑥, ⑦ and ⑨ keys of the remote control unit. 4. Adjust the screen until it becomes white using the ④, ⑥, ⑦ and ⑨ keys of the remote control unit. * The ③ (EXIT) key is the cancel key for the WHITE BALANCE.
SUB BRIGHT Adjustment			**No.1 BRIGHT**	1. Receive a broadcast. 2. Select the No.1 BRIGHT of the PICTURE MODE. 3. Set the initial setting value of the No.1 BRIGHT with the LEFT / RIGHT key of the remote control unit. 4. If the brightness is not best with the initial setting value, make fine adjustment of the No.1 BRIGHT until you get the optimum brightness.

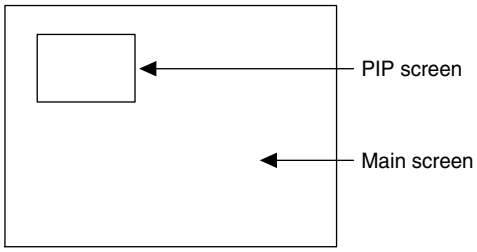




Item	Measuring instrument	Test point	Adjustment part	Description
SUB CONTRAST Adjustment			**No.2 PICTURE**	1. Receive a broadcast. 2. Select the No.2 PICTURE of the PICTURE MODE. 3. Set the initial setting value of the No.2 PICTURE with the LEFT / RIGHT key of the remote control unit. 4. If the contrast is not best with the initial setting value, make fine adjustment of the No.2 PICTURE until you get the optimum contrast.
SUB COLOR adjustment	**Signal generator Oscilloscope Remote control unit**	**TP-B TP-E1(⏚) [CRT SOCKET PWB]**	**No.3 COLOR**	**[Method of adjustment without measuring instrument]** 1. Receive a broadcast. 2. Select the No.3 COLOR of the PICTURE MODE. 3. Set the initial setting value of the No.3 COLOR with the LEFT/RIGHT key of the remote control unit. 4. If the color is not the best with the Initial setting value, make fine adjustment of the No.3 COLOR until you get the optimum color.
				[Method of adjustment using measuring instrument] 1. Input the full field color bar signal (75% white). 2. Select the No.3 COLOR of the PICTURE MODE. 3. Set the initial setting value of the No.3. COLOR with the LEFT/RIGHT key of the remote control unit. 4. Connect the oscilloscope between TP-B and TP-E1. 5. Adjust COLOR and bring the value of (A) in the illustration to the voltage –5V (V_{W-B}).
SUB TINT adjustment	**Signal generator Oscilloscope Remote control unit**	**TP-B TP-E1(⏚) [CRT SOCKET PWB]**	**No.4 TINT**	**[Method of adjustment without measuring instrument]** 1. Receive a broadcast. 2. Select the No.4 TINT of the PICTURE MODE. 3. Set the initial setting value of the No.4 TINT with the LEFT/RIGHT key of the remote control unit. 4. If the tint is not the best with the initial setting value, make fine adjustment of the No.4 TINT until you get the optimum tint.
				[Method of adjustment using measuring instrument] 1. Input the full field color bar signal (75% white). 2. Select the No.4 TINT of the PICTURE MODE. 3. Set the initial setting value of the No.4 TINT with the LEFT/RIGHT key to the remote control unit. 4. Connect the oscilloscope between TP-B and TP-E1. 5. Adjust TINT and bring the value of (B) in the illustration to the voltage +4V (V_{W-Mg}).
PIP HIGH LIGHT WHITE BALANCE	**Signal generator**		**No.8 P R DR No.10 P B DR**	1. Receive a black-and-white signal. (Color off) 2. Select the PIP MODE from the SERVICE MENU. 3. Then adjust the white color of the PIP screen using the No. 8 P R DR and the No. 10 P B DR of the PIP MODE so that it is the same brightness as the main screen.

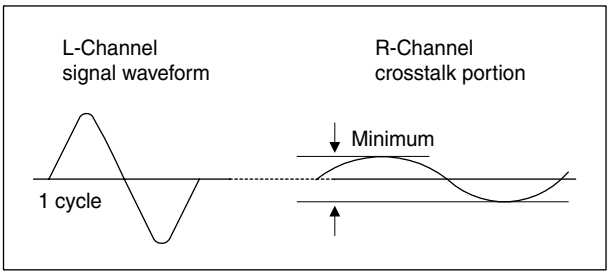






ADJUSTMENT OF MTS CIRCUIT

Item	Measuring instrument	Test point	Adjustment part	Description
MTS INPUT LEVEL check			**No.2 IN LEVEL**	1. Select the No.2 IN LEVEL of the SOUND MODE. 2. Verify that the No.2 IN LEVEL is set at its initial setting value.
MTS STEREO VCO adjustment	**Signal generator** **Frequency counter**	**[S2] Connector** **5 pin AUDIO R** **2 pin GND**	**No.3 FH MONITOR** **No.4 STEREO VCO**	1. Receive a RF signal (nonmodulated sound signal) from the antenna terminal. 2. Select the No.3 FH MONITOR of SOUND MODE, and change the setting value from 0 to 1. 3. Connect the Frequency Counter to pin 5 of [S2] connector and GND (Pin 2 of [S2] connector). 4. Select the No.4 STEREO VCO. 5. Set the initial setting value of the No.4 STEREO VCO with the LEFT/RIGHT key of the remote control unit. 6. Adjust the No.4 STEREO VCO so that the frequency counter will display 15.73kHz±0.1kHz. 7. Select the No.3 FH MONITOR of the SOUND MODE, and reset the setting value from 1 to 0.
MTS SAP VCO adjustment	**Signal generator** **Frequency counter**	**[S2] Connector** **3 pin TP_952.5** **2 pin GND** **5 pin AUDIO_R**	**No.9 5FH MON.** **No.10 SAP VCO**	1. Receive a RF signal (non modulated sound signal) from the antenna terminal. 2. Connect between pin 3 of [S2] connector and GND (Pin 2 of [S2] connector) through 1MΩ Resistor. 3. Select the No.9 5FH MON. of the SOUND MODE, and reset the setting value from 0 to 1. 4. Connect the Frequency Counter to pin 5 of [S2] connector and GND (Pin 2 of [S2] connector) . 5. Select the No.10 SAP VCO. 6. Set the initial setting value of the No.10 SAP VCO with the LEFT/RIGHT key of the remote control unit. 7. Adjust the No.10 SAP VCO so that the frequency counter will display 78.67kHz±0.5kHz. 8. Select the No.9 5FH MON. of the SOUND MODE, and reset the setting value from 1 to 0.
MTS FILTER check			**No.6 FILTER**	1. Select the No.6 FILTER of the SOUND MODE. 2. Verify that the No.6 FILTER is set at its initial setting value.
MTS SEPARATION adjustment	**TV audio multiplex signal generator** **Oscilloscope**	**[S2] Connector** **4 pin AUDIO_L** **5 pin AUDIO_R** **2 pin GND**	**No.7 LOW SEP.** **No.8 HI SEP.**	1. Input a stereo L signal (300Hz) from the TV audio multiplex signal generator to the antenna terminal. 2. Connect an oscilloscope to pin 4 of [S2] connector, and display one cycle portion of the 300Hz signal. 3. Change the connection of the oscilloscope to pin 5 of [S2] connector, and enlarge the voltage axis. 4. Select the No.7 LOW SEP. of the SOUND MODE. 5. Set the initial setting value of the No.7 LOW SEP. with the LEFT/RIGHT key of the remote control unit. 6. Adjust the No.7 LOW SEP. so that the 300Hz signal level will become minimum. 7. Change the signal to 3kHz, and connect an oscilloscope to pin 4 of [S2] connector. 8. Adjust the No.8 HI SEP. so that the 3kHz signal level will become minimum.



HOW TO CHECK THE HIGH VOLTAGE HOLD DOWN CIRCUIT

1. HIGH VOLTAGE HOLD DOWN CIRCUIT

After repairing the high voltage hold down circuit shown in Fig. 1.
This circuit shall be checked to operate correctly.

2. CHECKING OF THE HIGH VOLTAGE HOLD DOWN CIRCUIT

(1) Turn the POWER SW ON.
(2) As shown in Fig. 1, set the resistor (between S1 connector 2 & 3).
(3) Make sure that the screen picture disappears.
(4) Temporarily unplug the power cord.
(5) Remove the resistor (between S1 connector 2 & 3).
(6) Again plug the power cord, make sure that the normal picture is displayed on the screen.

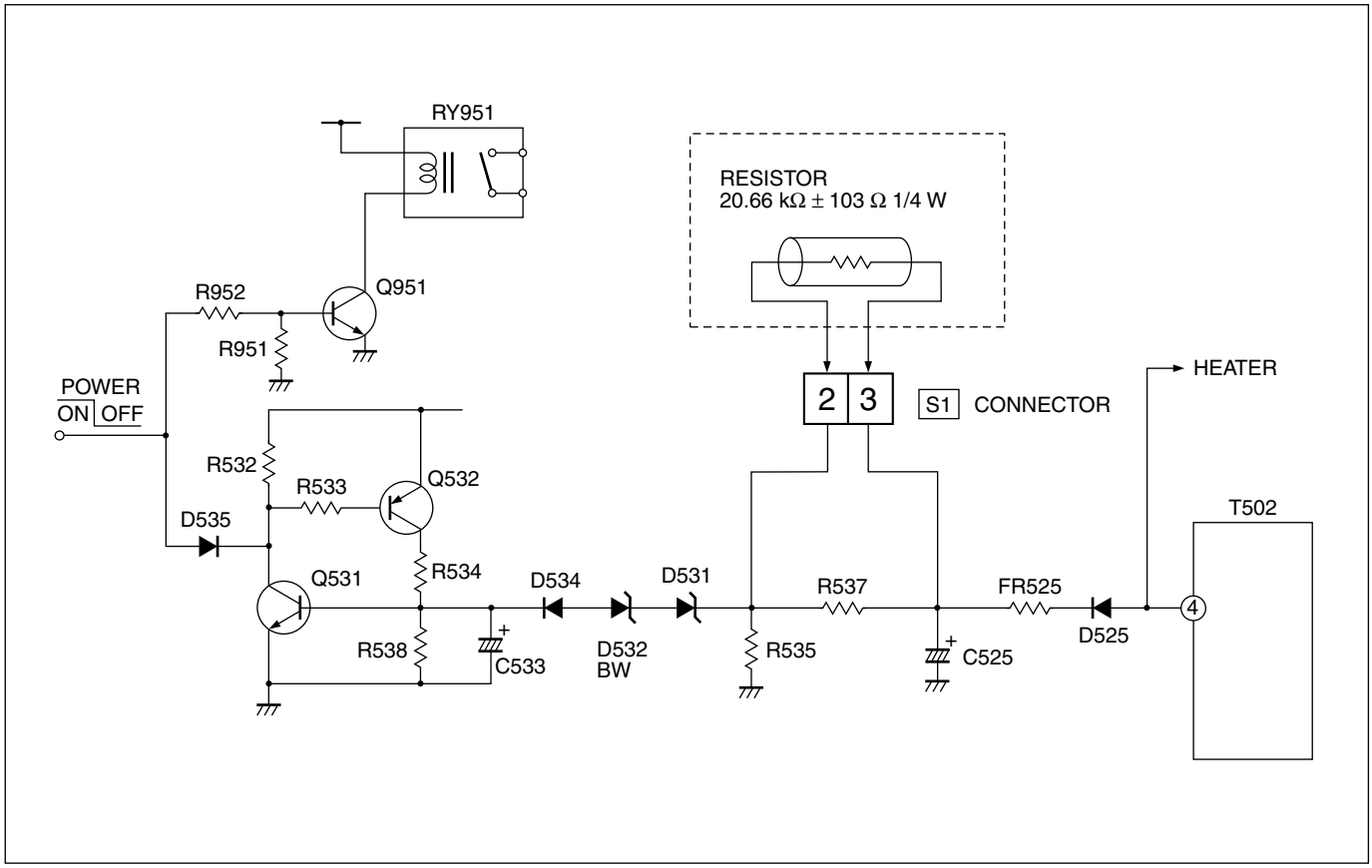


Fig. 1

SELF CHECK FUNCTIONS

1. Outline

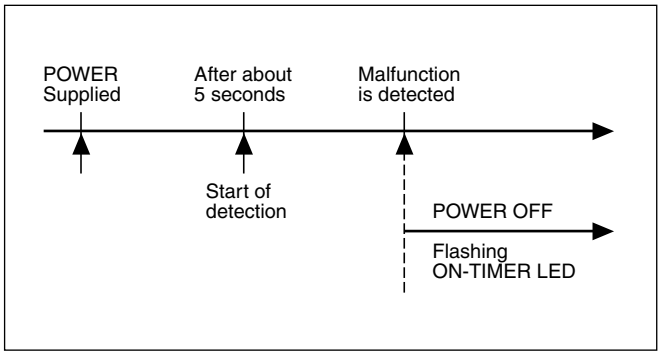
This model has self check functions given below. When a malfunction has been detected, the POWER is turned off and the LED flashes to inform of the failure . The malfunction is detected by the signal input state of the control line connected to the microcomputer.

2. Self check items

Check item	Details of detection	Method of detection	State of malfunction
Over-current protector	Operation of B1 protector circuit.	The microcomputer detects at 1 second intervals. If NG is detected for more than 200 ms, a malfunction is interpreted.	When a malfunction has been detected, the POWER is turned off. While the POWER is being turned off , the power key of the remote controller is not operational until the power code is taken out and put in again.

3. Self check indicating function

The self-check function begins detection about 5 seconds after power is supplied.
In the event a malfunction is detected, the power is cut off immediately.
At this time, the ON-TIMER LED flashes to inform of the malfunction.



[ON-TIMER LED indication]
The ON-TIMER LED flashes at 0.5 seconds intervals.

PARTS LIST

CAUTION

- The parts identified by the ⚠ symbol are important for the safety . Whenever replacing these parts, be sure to use specified ones to secure the safety .
- The parts not indicated in this Parts List and those which are filled with lines --- in the Parts No. columns will not be supplied .
- P. W. Board Ass'y will not be supplied, but those which are filled with the Parts No. in the Parts No. columns will be supplied .

ABBREVIATIONS OF RESISTORS, CAPACITORS AND TOLERANCES

RESISTORS		CAPACITORS	
C R	Carbon Resistor	C CAP.	Ceramic Capacitor
F R	Fusible Resistor	E CAP.	Electrolytic Capacitor
P R	Plate Resistor	M CAP.	Mylar Capacitor
V R	Variable Resistor	HV CAP.	High Voltage Capacitor
HV R	High Voltage Resistor	MF CAP.	Metalized Film Capacitor
MF R	Metal Film Resistor	MM CAP.	Metalized Mylar Capacitor
MG R	Metal Glazed Resistor	MP CAP.	Metalized Polystyrol Capacitor
MP R	Metal Plate Resistor	PP CAP.	Polypropylene Capacitor
OM R	Metal Oxide Film Resistor	PS CAP.	Polystyrol Capacitor
CMF R	Coating Metal Film Resistor	TF CAP.	Thin Film Capacitor
UNF R	Non-Flammable Resistor	MPP CAP.	Metalized Polypropylene Capacitor
CH V R	Chip Variable Resistor	TAN. CAP.	Tantalum Capacitor
CH MG R	Chip Metal Glazed Resistor	CH C CAP.	Chip Ceramic Capacitor
COMP. R	Composition Resistor	BP E CAP.	Bi-Polar Electrolytic Capacitor
LPTC R	Linear Positive Temperature Coefficient Resistor	CH AL E CAP.	Chip Aluminum Electrolytic Capacitor
		CH AL BP CAP.	Chip Aluminum Bi-Polar Capacitor
		CH TAN. E CAP.	Chip Tantalum Electrolytic Capacitor
		CH AL BP E CAP.	Chip Tantalum Bi-Polar Electrolytic Capacitor

RESISTORS									
F	G	J	K	M	N	R	H	Z	P
±1%	±2%	±5%	±10%	±20%	±30%	+30% -10%	+50% -10%	+80% -20%	+100% 0%

CONTENTS

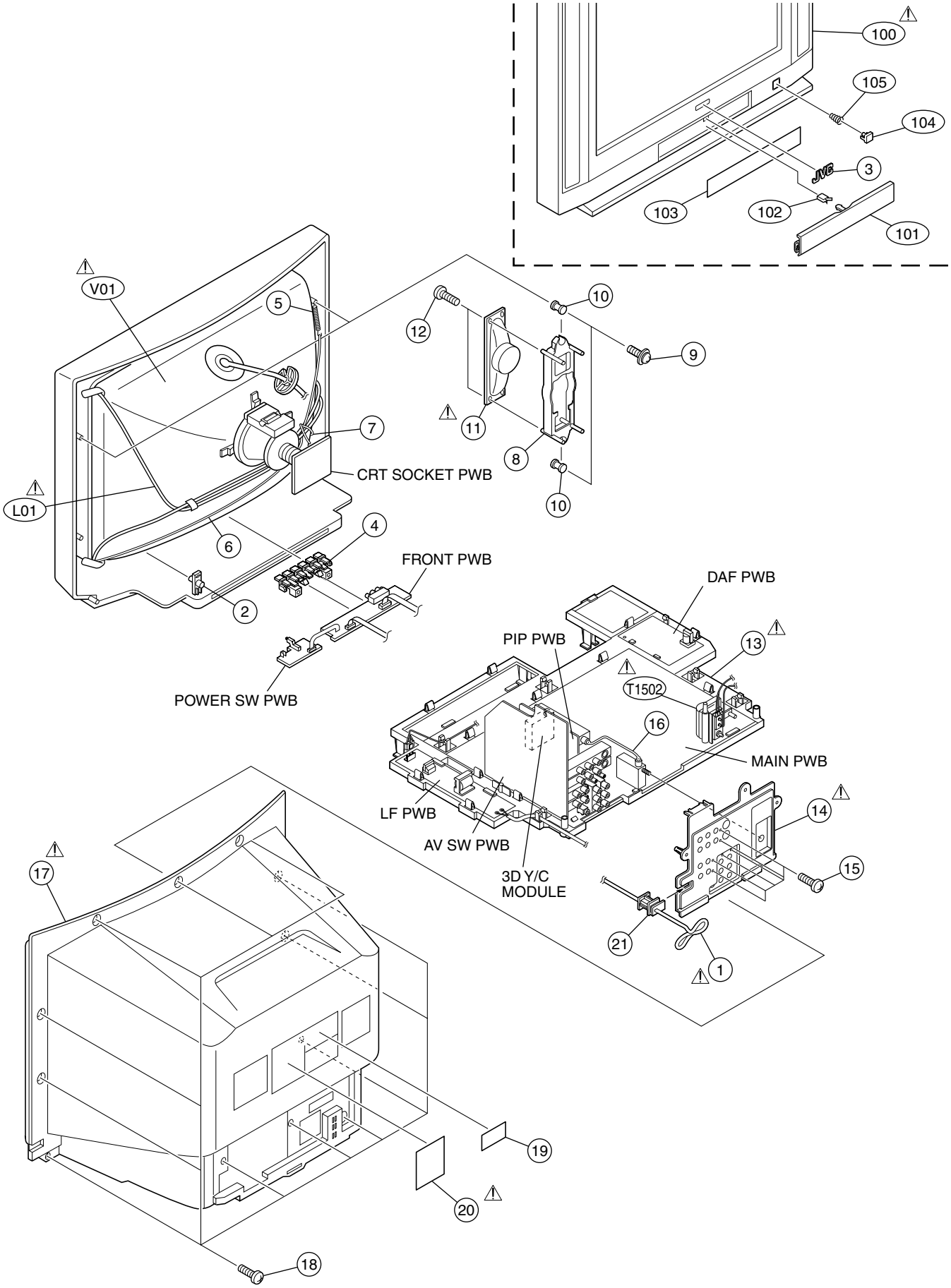
USING P.W. BOARD & REMOTE CONTROL UNIT

P.W.B ASS'Y \ Model	AV-27F802
MAIN PW BOARD	SAC-1501A-M2
DAF PW BOARD	SAC-2601A-M2
CRT SOCKET PW BOARD	SAC-3501A-M2
FRONT PW BOARD	SAC-8501A-M2
POWER SW PW BOARD	SAC-8601A-M2
LF PW BOARD	SAC-9501A-M2
PIP PW BOARD	SAC0P501A-M2
AV SW PW BOARD	SAC0S501A-M2
3D Y/C MODULE PW BOARD	SAC-0Y501A
REMOTE CONTROL UNIT	RM-C301G-1A

EXPLODED VIEW PARTS LIST

⚠	Ref.No.	Part No.	Part Name	Description	Local
⚠	L01	QQW0090-001	DEG COIL		
⚠	T1502	QQH0084-001	FBT	Within MAIN PWB	
⚠	V01	A68QCP891X001	CRT	Inc. DY	
⚠	1	QMPD200-200-JC	POWER CORD	CN90PW Within LF PWB	
	2	LC30191-003A-A	REMOCON WINDOW		
	3	CM48006-008-C	JVC MARK		
	4	LC20217-004A-A	CONTROL KNOB		
	5	A48457-4-S	SPRING		
	6	WJY0016-001A	BRAIDED WIRE		
	7	WJY0013-003A	BRAIDED WIRE		
	8	LC20629-001A-A	S.P HOLDER		
	9	LC40317-001A	TAPPING SCREW	(x4)	
	10	LC40226-001A	SPACER		
⚠	11	CEBSS12D-04KJ2	SPEAKER	(x2) SP01, SP02	
	12	QYSBSB4012Z	TAPPING SCREW	(x4)	
⚠	13	LC10883-001C-A	CHASSIS BASE		
⚠	14	LC20626-001C-A	TERMINAL BOARD		
	15	QYSBSB3010Z	TAPPING SCREW	(x6)	
	16	CHGY0031-0C	ANT CABLE ASSY		
⚠	17	LC10880-001C-A	REAR COVER		
	18	QYSBSFG4016Z	TAPPING SCREW	(x12)	
	19	LC30684-005A-A	BBE LABEL		
⚠	20	LC31139-001A-A	RATING LABEL		
	21	LC20106-001D-A	CORD CLAMP		
⚠	100	LC10878-001A-A	FRONT CABI ASSY	Inc. No. 101-105	
	101	LC20628-001A-A	DOOR		
	102	CM48229-00A-C	DOOR LATCH		
	103	LC31238-001A-A	OPERATION SHEET		
	104	LC31237-001A-A	POWER KNOB		
	105	CM36481-002A-A	SPRING		

EXPLODED VIEW



PRINTED WIRING BOARD PARTS LIST

MAIN PW BOARD ASS'Y (SAC-1501A-M2)

RESISTOR

⚠	Symbol No.	Part No.	Part Name	Description			Local
	R1001	NRSA63J-333X	MG R	33kΩ	1/16W	J	
	R1002	NRSA63J-102X	MG R	1kΩ	1/16W	J	
	R1003-04	NRSA63J-0R0X	MG R	0.0Ω	1/16W	J	
	R1011	NRSA63J-820X	MG R	82Ω	1/16W	J	
	R1012	NRSA63J-182X	MG R	1.8kΩ	1/16W	J	
	R1013	NRSA63J-562X	MG R	5.6kΩ	1/16W	J	
	R1014	QRE121J-101Y	C R	100Ω	1/2W	J	
	R1015	NRSA63J-180X	MG R	18Ω	1/16W	J	
	R1016	NRSA63J-270X	MG R				
	R1018-19	NRSA63J-104X	MG R	100kΩ	1/16W	J	
	R1020	NRSA63J-332X	MG R	3.3kΩ	1/16W	J	
	R1021	NRSA63J-333X	MG R	33kΩ	1/16W	J	
	R1022	NRSA63J-331X	MG R	330Ω	1/16W	J	
	R1023	NRSA63J-101X	MG R	100Ω	1/16W	J	
	R1024	NRSA63J-102X	MG R	1kΩ	1/16W	J	
	R1025	NRSA63J-561X	MG R	560Ω	1/16W	J	
	R1026	NRSA63J-331X	MG R	330Ω	1/16W	J	
	R1028	NRSA63J-821X	MG R	820Ω	1/16W	J	
	R1029	NRSA63J-333X	MG R	33kΩ	1/16W	J	
	R1030	NRSA63J-683X	MG R	68kΩ	1/16W	J	
	R1038	NRSA63J-272X	MG R	2.7kΩ	1/16W	J	
	R1039	NRSA63J-0R0X	MG R	0.0Ω	1/16W	J	
	R1041	NRSA63J-272X	MG R	2.7kΩ	1/16W	J	
	R1042-43	NRSA63J-102X	MG R	1kΩ	1/16W	J	
	R1044-46	NRSA63J-0R0X	MG R	0.0Ω	1/16W	J	
	R1047	NRSA63J-153X	MG R	15kΩ	1/16W	J	
	R1048	NRSA63J-154X	MG R	150kΩ	1/16W	J	
	R1101-02	NRSA63J-101X	MG R	100Ω	1/16W	J	
	R1111	NRSA63J-105X	MG R	1MΩ	1/16W	J	
	R1131	NRSA63J-272X	MG R	2.7kΩ	1/16W	J	
	R1132	NRSA63J-153X	MG R	15kΩ	1/16W	J	
	R1133	NRSA63J-683X	MG R	68kΩ	1/16W	J	
	R1134	NRSA63J-562X	MG R	5.6kΩ	1/16W	J	
	R1135-39	NRSA63J-102X	MG R	1kΩ	1/16W	J	
	R1140	NRSA63J-562X	MG R	5.6kΩ	1/16W	J	
	R1155	NRSA63J-223X	MG R	22kΩ	1/16W	J	
	R1156	NRSA63J-562X	MG R	5.6kΩ	1/16W	J	
	R1201	NRSA63J-333X	MG R	33kΩ	1/16W	J	
	R1231	NRSA63J-182X	MG R	1.8kΩ	1/16W	J	
	R1237	NRSA63J-392X	MG R	3.9kΩ	1/16W	J	
	R1238	NRSA63J-473X	MG R	47kΩ	1/16W	J	
	R1241	NRSA63J-332X	MG R	3.3kΩ	1/16W	J	
	R1243	NRSA63J-152X	MG R	1.5kΩ	1/16W	J	
	R1281	NRSA63J-182X	MG R	1.8kΩ	1/16W	J	
	R1282	NRSA63J-682X	MG R	6.8kΩ	1/16W	J	
	R1283	NRSA63J-681X	MG R	680Ω	1/16W	J	
	R1286	NRSA63J-472X	MG R	4.7kΩ	1/16W	J	
	R1287	NRSA63J-101X	MG R	100Ω	1/16W	J	
	R1288	NRSA63J-271X	MG R	270Ω	1/16W	J	
	R1289	NRSA63J-154X	MG R	150kΩ	1/16W	J	
	R1292	NRSA63J-124X	MG R	120kΩ	1/16W	J	
	R1293	NRSA63J-224X	MG R	220kΩ	1/16W	J	
	R1301-03	NRSA63J-222X	MG R	2.2kΩ	1/16W	J	
	R1304-06	NRSA63J-101X	MG R	100Ω	1/16W	J	
	R1318	NRSA63J-472X	MG R	4.7kΩ	1/16W	J	
	R1319	NRSA63J-101X	MG R	100Ω	1/16W	J	
	R1354-55	NRSA63J-0R0X	MG R	0.0Ω	1/16W	J	
	R1356	NRSA63J-123X	MG R	12kΩ	1/16W	J	
	R1359	NRSA63J-103X	MG R	10kΩ	1/16W	J	
	R1360	NRSA63J-0R0X	MG R	0.0Ω	1/16W	J	
	R1401	NRSA63J-822X	MG R	8.2kΩ	1/16W	J	
	R1403	QRX01GJ-1R0	MF R	1.0Ω	1W	J	
	R1404	QRE121J-100Y	C R	10Ω	1/2W	J	
	R1405	NRSA63J-103X	MG R	10kΩ	1/16W	J	
	R1407	NRSA02J-0R0X	MG R	0.0Ω	1/10W	J	
	R1411-12	NRSA63J-103X	MG R	10kΩ	1/16W	J	
	R1414	QRL029J-221	OM R	220Ω	2W	J	
	R1417	QRE121J-180Y	C R	18Ω	1/2W	J	
	R1431	QRE121J-272Y	C R	2.7kΩ	1/2W	J	
	R1432	NRSA63J-104X	MG R	100kΩ	1/16W	J	
	R1433	NRSA63J-473X	MG R	47kΩ	1/16W	J	
	R1434	NRSA63J-822X	MG R	8.2kΩ	1/16W	J	
	R1435	NRSA63J-682X	MG R	6.8kΩ	1/16W	J	
	R1440	NRSA63J-101X	MG R	100Ω	1/16W	J	
	R1441	NRSA63J-103X	MG R	10kΩ	1/16W	J	

RESISTOR

⚠	Symbol No.	Part No.	Part Name	Description			Local
	R1501	NRSA63J-0R0X	MG R	0.0Ω	1/16W	J	
	R1502	NRSA63J-271X	MG R	270Ω	1/16W	J	
	R1503	QRE121J-103Y	C R	10kΩ	1/2W	J	
	R1504	QRL039J-122	OM R	1.2kΩ	3W	J	
	R1505	QRL039J-152	OM R	1.5kΩ	3W	J	
	R1507	QRF074J-2R0	UNF R				
	R1511	QRE121J-220Y	C R	22Ω	1/2W	J	
	R1512	QRE121J-681Y	C R	680Ω	1/2W	J	
	R1513	QRL039J-273	OM R	27kΩ	3W	J	
	R1522	NRSA63J-221X	MG R	220Ω	1/16W	J	
	R1523	QRJ146J-333X	C R	33kΩ	1/4W	J	
⚠	R1525	QRZ9011-470	F R				
	R1526	QRE121J-272Y	C R	2.7kΩ	1/2W	J	
	R1527	QRE121J-154Y	C R	150kΩ	1/2W	J	
	R1528	QRE121J-124Y	C R	120kΩ	1/2W	J	
	R1529	NRSA63J-331X	MG R	330Ω	1/16W	J	
⚠	R1531	QRJ146J-391X	C R	390Ω	1/4W	J	
	R1532	NRSA63J-273X	MG R	27kΩ	1/16W	J	
	R1533-34	NRSA63J-123X	MG R	12kΩ	1/16W	J	
⚠	R1535	NRVA02D-242X	MF R	2.4kΩ	1/10W	D	
⚠	R1537	NRZ0032-7151X	MF R				
	R1538	NRSA63J-333X	MG R	33kΩ	1/16W	J	
	R1543	QRE121J-122Y	C R	1.2kΩ	1/2W	J	
	R1544	QRE121J-392Y	C R	3.9kΩ	1/2W	J	
	R1545	QRE121J-822Y	C R	8.2kΩ	1/2W	J	
	R1546	NRSA63J-331X	MG R	330Ω	1/16W	J	
	R1547	NRSA63J-104X	MG R	100kΩ	1/16W	J	
	R1548	QRE121J-821Y	C R	820Ω	1/2W	J	
	R1553	QRL039J-390	OM R	39Ω	3W	J	
	R1601-06	NRSA63J-750X	MG R	75Ω	1/16W	J	
	R1607-09	NRSA63J-332X	MG R	3.3kΩ	1/16W	J	
	R1651-52	NRSA63J-0R0X	MG R	0.0Ω	1/16W	J	
	R1700-02	NRSA63J-102X	MG R	1kΩ	1/16W	J	
	R1704-05	NRSA63J-472X	MG R	4.7kΩ	1/16W	J	
	R1706-07	NRSA63J-103X	MG R	10kΩ	1/16W	J	
	R1708-09	NRSA63J-101X	MG R	100Ω	1/16W	J	
	R1711	NRSA63J-0R0X	MG R	0.0Ω	1/16W	J	
	R1714	NRSA63J-102X	MG R	1kΩ	1/16W	J	
	R1715	NRSA63J-103X	MG R	10kΩ	1/16W	J	
	R1721-22	NRSA63J-102X	MG R	1kΩ	1/16W	J	
	R1724-28	NRSA63J-102X	MG R	1kΩ	1/16W	J	
	R1729	NRSA63J-223X	MG R	22kΩ	1/16W	J	
	R1731-32	NRSA63J-101X	MG R	100Ω	1/16W	J	
	R1733-34	NRSA63J-272X	MG R	2.7kΩ	1/16W	J	
	R1737	NRSA63J-153X	MG R	15kΩ	1/16W	J	
	R1738	NRSA63J-102X	MG R	1kΩ	1/16W	J	
	R1739	NRSA63J-0R0X	MG R	0.0Ω	1/16W	J	
	R1740	NRSA63J-103X	MG R	10kΩ	1/16W	J	
	R1741	NRSA63J-0R0X	MG R	0.0Ω	1/16W	J	
	R1742-43	NRSA63J-103X	MG R	10kΩ	1/16W	J	
	R1744	NRSA63J-333X	MG R	33kΩ	1/16W	J	
	R1745	NRSA63J-0R0X	MG R	0.0Ω	1/16W	J	
	R1748	NRSA63J-103X	MG R	10kΩ	1/16W	J	
	R1749-51	NRSA63J-222X	MG R	2.2kΩ	1/16W	J	
	R1752	NRSA63J-102X	MG R	1kΩ	1/16W	J	
	R1753	NRSA63J-0R0X	MG R	0.0Ω	1/16W	J	
	R1754	NRSA63J-332X	MG R	3.3kΩ	1/16W	J	
	R1755	NRSA63J-393X	MG R	39kΩ	1/16W	J	
	R1756	NRSA63J-103X	MG R	10kΩ	1/16W	J	
	R1762	NRSA63J-102X	MG R	1kΩ	1/16W	J	
	R1763	NRSA63J-103X	MG R	10kΩ	1/16W	J	
	R1764-68	NRSA63J-221X	MG R	220Ω	1/16W	J	
	R1769-70	NRSA63J-682X	MG R	6.8kΩ	1/16W	J	
	R1772	NRSA63J-103X	MG R	10kΩ	1/16W	J	
	R1774	NRSA63J-682X	MG R	6.8kΩ	1/16W	J	
	R1775	NRSA63J-563X	MG R	56kΩ	1/16W	J	
	R1776	NRSA63J-272X	MG R	2.7kΩ	1/16W	J	
	R1777	NRSA63J-103X	MG R	10kΩ	1/16W	J	
	R1778	NRSA63J-682X	MG R	6.8kΩ	1/16W	J	
	R1790	NRSA63J-273X	MG R	27kΩ	1/16W	J	
	R1791	NRSA63J-683X	MG R	68kΩ	1/16W	J	
	R1792	NRSA63J-103X	MG R	10kΩ	1/16W	J	
	R1793-95	NRSA63J-331X	MG R	330Ω	1/16W	J	
	R1798-99	NRSA63J-103X	MG R	10kΩ	1/16W	J	
	R1800	NRSA63J-103X	MG R	10kΩ	1/16W	J	

⚠	Symbol No.	Part No.	Part Name	Description		Local
	RESISTOR					
	R1806	NRSA63J-102X	MG R	1kΩ	1/16W	J
	R1810	NRSA63J-0R0X	MG R	0.0Ω	1/16W	J
	R1811	NRSA63J-473X	MG R	47kΩ	1/16W	J
	R1812	NRSA63J-102X	MG R	1kΩ	1/16W	J
	R1814	NRSA63J-104X	MG R	100kΩ	1/16W	J
	R1815	NRSA63J-154X	MG R	150kΩ	1/16W	J
	R1816	NRSA63J-0R0X	MG R	0.0Ω	1/16W	J
	R1817	NRSA63J-104X	MG R	100kΩ	1/16W	J
	R1821	NRSA63J-104X	MG R	100kΩ	1/16W	J
	R1824	NRSA63J-103X	MG R	10kΩ	1/16W	J
	R1827	NRSA63J-102X	MG R	1kΩ	1/16W	J
	R1857	QRG029J-330	OM R	33Ω	2W	J
	R1858	QRG029J-180	OM R	18Ω	2W	J
	R1860	NRSA63J-562X	MG R	5.6kΩ	1/16W	J
	R1901	QRF074K-R47	UNF R	0.47Ω	7W	K
	R1909	QRG01GJ-470	OM R	47Ω	1W	J
	R1911	QRE121J-223Y	C R	22kΩ	1/2W	J
	R1912	QRT029J-R18	MF R	0.18Ω	2W	J
	R1913	QRT029J-R15	MF R	0.15Ω	2W	J
	R1914	QRK126J-681X	C R	680Ω	1/2W	J
	R1915	QRE121J-270Y	C R	27Ω	1/2W	J
	R1917	QRK126J-332X	C R	3.3kΩ	1/2W	J
	R1918	QRE121J-222Y	C R	2.2kΩ	1/2W	J
	R1919	QRE121J-684Y	C R	680kΩ	1/2W	J
	R1924	QRE121J-222Y	C R	2.2kΩ	1/2W	J
	R1930	QRE121J-223Y	C R	22kΩ	1/2W	J
	R1939	QRT039J-2R2	MF R	2.2Ω	3W	J
	R1940	QRE121J-181Y	C R	180Ω	1/2W	J
	R1941	QRL029J-183	OM R	18kΩ	2W	J
	R1943	NRSA63J-104X	MG R	100kΩ	1/16W	J
	R1944	NRSA63J-122X	MG R	1.2kΩ	1/16W	J
	R1951	NRSA63J-473X	MG R	47kΩ	1/16W	J
	R1952	NRSA63J-102X	MG R	1kΩ	1/16W	J
	R1953	QRE121J-151Y	C R	150Ω	1/2W	J
	R1972	NRVA02D-102X	MF R	1kΩ	1/10W	D
	R1973	QRE121J-272Y	C R	2.7kΩ	1/2W	J
	R1975	QRE121J-223Y	C R	22kΩ	1/2W	J
	R1977	QRE121J-473Y	C R	47kΩ	1/2W	J
	R1978	NRSA63J-333X	MG R	33kΩ	1/16W	J
	CAPACITOR					
	C1001	QETN1HM-475Z	E CAP.	4.7µF	50V	M
	C1002	QETN1HM-106Z	E CAP.	10µF	50V	M
	C1003	QETN1CM-108Z	E CAP.	1000µF	16V	M
	C1011-12	NCB31HK-103X	C CAP.	0.01µF	50V	K
	C1014	QETN1CM-107Z	E CAP.	100µF	16V	M
	C1015-16	NCB31HK-103X	C CAP.	0.01µF	50V	K
	C1021	QFV71HJ-824Z	MF CAP.	0.82µF	50V	J
	C1023	QETN1CM-107Z	E CAP.	100µF	16V	M
	C1024	NCB31HK-103X	C CAP.	0.01µF	50V	K
	C1025	NCB31HK-102X	C CAP.	1000pF	50V	K
	C1026	QETN1HM-106Z	E CAP.	10µF	50V	M
	C1027	NCB21HK-104X	CHIP CAP.	0.1µF	50V	K
	C1028	QETN1HM-106Z	E CAP.	10µF	50V	M
	C1029	QETN1CM-336Z	E CAP.	33µF	16V	M
	C1030	NCB31HK-103X	C CAP.	0.01µF	50V	K
	C1034	NCB31HK-103X	C CAP.	0.01µF	50V	K
	C1037	NCB31HK-103X	C CAP.	0.01µF	50V	K
	C1038	QETN1CM-107Z	E CAP.	100µF	16V	M
	C1041	QETN1HM-474Z	E CAP.	0.47µF	50V	M
	C1042	QETN1HM-106Z	E CAP.	10µF	50V	M
	C1043-44	NDC31HJ-390X	C CAP.	39pF	50V	J
	C1045	QETN1HM-106Z	E CAP.	10µF	50V	M
	C1046	NCB31HK-103X	C CAP.	0.01µF	50V	K
	C1047	NDC21HJ-330X	C CAP.	33pF	50V	J
	C1048	NCB31HK-103X	C CAP.	0.01µF	50V	K
	C1111	QETN0JM-108Z	E CAP.	1000µF	6.3V	M
	C1112	NCB31HK-103X	C CAP.	0.01µF	50V	K
	C1113	QETN1HM-474Z	E CAP.	0.47µF	50V	M
	C1114	QETN1HM-105Z	E CAP.	1µF	50V	M
	C1115	QFV71HJ-104Z	MF CAP.	0.1µF	50V	J
	C1116	NCB21HK-104X	CHIP CAP.	0.1µF	50V	K
	C1131-32	NDC31HJ-100X	C CAP.	10pF	50V	J
	C1133	NDC31HJ-220X	C CAP.	22pF	50V	J

⚠	Symbol No.	Part No.	Part Name	Description		Local
	CAPACITOR					
	C1134	NDC31HJ-100X	C CAP.	10pF	50V	J
	C1135	NDC31HJ-330X	C CAP.	33pF	50V	J
	C1136	QENC1CM-106Z	BP E CAP.	10µF	16V	M
	C1150	NCF21CZ-105X	C CAP.	1µF	16V	Z
	C1151	NCB31HK-103X	C CAP.	0.01µF	50V	K
	C1152	QENC1HM-105Z	BP E CAP.	1µF	50V	M
	C1201	NDC31HJ-100X	C CAP.	10pF	50V	J
	C1202	QETN1HM-224Z	E CAP.	0.22µF	50V	M
	C1203	NCB31HK-222X	CHIP CAP.	2200pF	50V	K
	C1233	NDC31HJ-560X	C CAP.	56pF	50V	J
	C1237	NCB31HK-103X	C CAP.	0.01µF	50V	K
	C1281	QFV71HJ-474Z	MF CAP.	0.47µF	50V	J
	C1282	QETN1CM-227Z	E CAP.	220µF	16V	M
	C1283	NCB31HK-103X	C CAP.	0.01µF	50V	K
	C1284	QETN1HM-225Z	E CAP.	2.2µF	50V	M
	C1285	NCB31HK-272X	CHIP CAP.	2700pF	50V	K
	C1286	QETN1HM-106Z	E CAP.	10µF	50V	M
	C1287	QETN1CM-107Z	E CAP.	100µF	16V	M
	C1288	NCB31HK-103X	C CAP.	0.01µF	50V	K
	C1302	NCB21HK-104X	CHIP CAP.	0.1µF	50V	K
	C1352	QETN1CM-336Z	E CAP.	33µF	16V	M
	C1354	QFV71HJ-154Z	MF CAP.	0.15µF	50V	J
	C1391	QETN1CM-107Z	E CAP.	100µF	16V	M
	C1392	NCB31HK-103X	C CAP.	0.01µF	50V	K
	C1393-95	NCB21HK-104X	CHIP CAP.	0.1µF	50V	K
	C1401	NDC21HJ-152X	C CAP.	1500pF	50V	J
	C1403	NCB21HK-393X	C CAP.	0.039µF	50V	K
	C1404	QETN1VM-107Z	E CAP.	100µF	35V	M
	C1405	QCS32HJ-100Z	C CAP.	10pF	500V	J
	C1407	QFLC2AK-563Z	M CAP.	0.056µF	100V	K
	C1410	QFLC2AJ-104Z	M CAP.	0.1µF	100V	J
	C1411	QETN1HM-105Z	E CAP.	1µF	50V	M
	C1415	NCB21HK-104X	CHIP CAP.	0.1µF	50V	K
	C1421	QEHQ1VM-108	E CAP.	1000µF	35V	M
	C1431	QETN1HM-105Z	E CAP.	1µF	50V	M
	C1432	QETN1EM-476Z	E CAP.	47µF	25V	M
	C1501	QCB32HK-151Z	C CAP.	150pF	500V	K
	C1502	QCB32HK-331Z	C CAP.	330pF	500V	K
	C1503	QETN2CM-105Z	E CAP.	1µF	160V	M
	C1504	QEZ0203-107	E CAP.	100µF	160V	M
	C1505	QENC2AM-225Z	BP E CAP.	2.2µF	100V	M
	C1507	QEZ0195-475Z	E CAP.			
⚠	C1510	QFZ0196-402	MPP CAP.			
⚠	C1513	QFZ0196-113	MPP CAP.			
⚠	C1514	QFP32GJ-183	PP CAP.	0.018µF	400V	J
⚠	C1515	QFZ0197-394	MPP CAP.			
	C1516	QCB32HK-561Z	C CAP.	560pF	500V	K
	C1521	QETN2EM-106Z	E CAP.	10µF	250V	M
	C1523	QEHR1EM-108Z	E CAP.	1000µF	25V	M
	C1524	QETN1EM-108Z	E CAP.	1000µF	25V	M
	C1525	QETN1VM-107Z	E CAP.	100µF	35V	M
	C1526	QFV21HJ-824Z	MF CAP.	0.82µF	50V	J
	C1527	QFV71HJ-104Z	MF CAP.	0.1µF	50V	J
	C1531	QCB32HK-102Z	C CAP.	1000pF	500V	K
	C1533	QETN1HM-106Z	E CAP.	10µF	50V	M
	C1601-06	QETN1EM-476Z	E CAP.	47µF	25V	M
	C1607	QETN1HM-106Z	E CAP.	10µF	50V	M
	C1608	NCB31HK-103X	C CAP.	0.01µF	50V	K
	C1609-11	QFV71HJ-104Z	MF CAP.	0.1µF	50V	J
	C1612	QETN1HM-105Z	E CAP.	1µF	50V	M
	C1663-64	QETN1EM-476Z	E CAP.	47µF	25V	M
	C1700	NCB31HK-102X	C CAP.	1000pF	50V	K
	C1703	NDC31HJ-181X	C CAP.	180pF	50V	J
	C1706	QETN1HM-105Z	E CAP.	1µF	50V	M
	C1707	QETN1CM-107Z	E CAP.	100µF	16V	M
	C1708-09	NDC31HJ-330X	C CAP.	33pF	50V	J
	C1710	NCB21EK-683X	C CAP.	0.068µF	25V	K
	C1714	QETN1HM-105Z	E CAP.	1µF	50V	M
	C1721	NCB31HK-103X	C CAP.	0.01µF	50V	K
	C1722-23	NDC31HJ-390X	C CAP.	39pF	50V	J
	C1724	NDC31HJ-471X	C CAP.	470pF	50V	J
	C1726	NDC21HJ-561X	C CAP.	560pF	50V	J
	C1800	QETN1CM-107Z	E CAP.	100µF	16V	M

⚠	Symbol No.	Part No.	Part Name	Description		Local
	CAPACITOR					
	C1801	NCB21HK-104X	CHIP CAP.	0.1µF	50V K	
	C1802	QETN1CM-107Z	E CAP.	100µF	16V M	
	C1803	QETN1HM-106Z	E CAP.	10µF	50V M	
	C1804	NDC31HJ-102X	C CAP.	1000pF	50V J	
	C1805	NCB31HK-153X	C CAP.	0.015µF	50V K	
	C1806-07	QETN1HM-106Z	E CAP.	10µF	50V M	
	C1810	QETN1HM-474Z	E CAP.	0.47µF	50V M	
	C1811	QETN1HM-105Z	E CAP.	1µF	50V M	
	C1813	NCB31HK-102X	C CAP.	1000pF	50V K	
	C1816	NCB31HK-153X	C CAP.	0.015µF	50V K	
	C1851	QETN1EM-107Z	E CAP.	100µF	25V M	
	C1852	QETN1CM-107Z	E CAP.	100µF	16V M	
	C1853-54	QETN1CM-227Z	E CAP.	220µF	16V M	
	C1856	QETN1CM-227Z	E CAP.	220µF	16V M	
	C1857	QETN1CM-477Z	E CAP.	470µF	16V M	
⚠	C1904	QCZ9054-102	C CAP.	1000pF	AC250V Z	
⚠	C1905	QCZ9054-102	C CAP.	1000pF	AC250V Z	
⚠	C1906	QCZ9054-102	C CAP.	1000pF	AC250V Z	
⚠	C1907	QEZ0169-477	E CAP.	470µF	200V M	
⚠	C1908	QCZ9054-102	C CAP.	1000pF	AC250V Z	
	C1912	QCZ0340-332	C CAP.			
	C1913	QFLC1HJ-471Z	M CAP.	470pF	50V J	
	C1914	QETN1HM-107Z	E CAP.	100µF	50V M	
	C1916	NDC31HJ-331X	C CAP.	330pF	50V J	
	C1917	NCB31HK-222X	CHIP CAP.	2200pF	50V K	
	C1918	NCB21HK-104X	CHIP CAP.	0.1µF	50V K	
	C1919	QFP32GJ-103	PP CAP.	0.01µF	400V J	
	C1925	NRSA63J-0R0X	MG R	0.0Ω	1/16W J	
	C1931	QEZ0203-227	E CAP.	220µF	160V M	
	C1932	QETN1CM-108Z	E CAP.	1000µF	16V M	
	C1933	QETM1EM-228	E CAP.	2200µF	25V M	
	C1934-35	QETN1EM-108Z	E CAP.	1000µF	25V M	
	C1937	QCZ0340-102	C CAP.			
	C1938	QETM1EM-228	E CAP.	2200µF	25V M	
	C1939-40	QCB32HK-152Z	C CAP.	1500pF	500V K	
	C1942	QETN1HM-105Z	E CAP.	1µF	50V M	
	C1943	QETN1CM-108Z	E CAP.	1000µF	16V M	
	C1948	QETN1EM-476Z	E CAP.	47µF	25V M	
	C1951	QETN1EM-108Z	E CAP.	1000µF	25V M	
	C1971	QETN1CM-107Z	E CAP.	100µF	16V M	
	C1972	QETN1EM-476Z	E CAP.	47µF	25V M	
	C1973	QETN1HM-106Z	E CAP.	10µF	50V M	
⚠	C1998-99	QCZ9074-103	C CAP.	0.01µF	400V M	
	TRANSFORMER					
	T1501	CE42034-002	H.DRIVE TRANSF.			
⚠	T1502	QQH0084-001	FBT			
⚠	T1921	QQS0090-001	SW TRANSF.			
⚠	T1951	QQT0315-001	POWER TRANSF.			
	COIL					
⚠	L1001	QQL244K-560Z	PEAKING COIL			
	L1012	QQLZ014-R39	PEAKING COIL			
	L1021	QRN143J-0R0X	C R	0.0Ω	1/4W J	
	L1022	QQL244K-220Z	PEAKING COIL			
	L1024	QQL244K-220Z	PEAKING COIL			
	L1027	QRN143J-0R0X	C R	0.0Ω	1/4W J	
	L1041	QRN143J-0R0X	C R	0.0Ω	1/10W J	
	L1042	QQL244K-220Z	PEAKING COIL			
	L1101	QQL244K-470Z	COIL	47µH	K	
	L1232	QQL244K-560Z	PEAKING COIL			
⚠	L1511	QQR1165-001	LINEARITY COIL			
	L1512	QQLZ027-821	CHOKE COIL			
⚠	L1521	QQLZ018-480	HEATER CHOKE			
	L1700	QQL244K-4R7Z	COIL	4.7µH	K	
	L1810	QQL244J-100Z	COIL	10µH	J	
	L1931	QQL26AK-470Z	COIL	47µH	K	
	L1933-34	QQL26AK-470Z	COIL	47µH	K	
	L1937	QQL26AK-470Z	COIL	47µH	K	

⚠	Symbol No.	Part No.	Part Name	Description		Local
	DIODE					
	D1101-02	UDZS8.2B-X	ZENER DIODE			
	D1305-07	MA153A-X	SI.DIODE			
	D1352	UDZS9.1B-X	ZENER DIODE			
	D1353	1SS355-X	SI.DIODE			
	D1401	1SR35-400A-T2	SI.DIODE			
	D1431	1SR35-400A-T2	SI.DIODE			
	D1432	1SS355-X	SI.DIODE			
	D1501	RH3G-F1	SI.DIODE			
	D1502	RU3AM-LFC4	SI.DIODE			
	D1507	RGP10J-5025-T3	SI.DIODE			
	D1521	RH1S-T3	SI.DIODE			
	D1523-24	EL1Z-T3	SI.DIODE			
	D1525-26	1SS81-T5	SI.DIODE			
	D1527	1SR124-400A-T2	SI.DIODE			
	D1529	MA3051/H/-X	ZENER DIODE			
⚠	D1531	MA4068N/Z1/-T2	ZENER DIODE			
	D1534-35	1SS355-X	SI.DIODE			
	D1537	1SR35-400A-T2	SI.DIODE			
	D1601-06	UDZS9.1B-X	ZENER DIODE			
	D1701-02	1SS355-X	SI.DIODE			
	D1706-10	MA3082/M/-X	ZENER DIODE			
	D1711	1SS81-T2	SI.DIODE			
	D1712-15	1SS355-X	SI.DIODE			
	D1716	NRSA02J-0R0X	MG R	0.0Ω	1/10W J	
	D1721-22	1SS355-X	SI.DIODE			
	D1723-24	MTZJ5.6B-T2	ZENER DIODE			
	D1800	1SS81-T2	SI.DIODE			
	D1801	1SS355-X	SI.DIODE			
	D1810	MA3082/M/-X	ZENER DIODE			
	D1811	1SS355-X	SI.DIODE			
⚠	D1901	RBV-406M	BRIDGE DIODE			
	D1910	MA700A-T2	SI.DIODE			
	D1911	RGP10J-5025-T3	SI.DIODE			
	D1912	RGP10J-5025-T3	SI.DIODE			
	D1913	RGP10J-5025-T3	SI.DIODE			
	D1914	1SS355-X	SI.DIODE			
	D1915	SARS01-T2	SI.DIODE			
	D1917	MA3270/H/-X	ZENER DIODE			
	D1918	MA3051/H/-X	ZENER DIODE			
	D1920	1SS355-X	SI.DIODE			
	D1930	RGP10J-5025-T3	SI.DIODE			
	D1931	RU30A-F1	SI.DIODE			
	D1933	RU3YX-LFC4	SI.DIODE			
	D1935	RU3YX-LFC4	SI.DIODE			
	D1937	RU3YX-LFC4	SI.DIODE			
	D1941	MA3300/M/-X	CHIP ZENER DIODE			
	D1945	1SS355-X	SI.DIODE			
	D1952-53	1SS355-X	SI.DIODE			
	D1954-57	1SR35-400A-T2	SI.DIODE			
	D1958	NRSA02J-0R0X	MG R	0.0Ω	1/10W J	
	D1972	MA3150/M/-X	ZENER DIODE			
	D1973	1SS355-X	SI.DIODE			
	TRANSISTOR					
	Q1011	2SC5083/L-P/-T	SI.TRANSISTOR			
	Q1021	2SC2412K/QR/-X	SI.TRANSISTOR			
	Q1024	2SC2412K/QR/-X	SI.TRANSISTOR			
	Q1025	2SA1037AK/QR/-X	SI.TRANSISTOR			
	Q1041	2SA1037AK/QR/-X	SI.TRANSISTOR			
	Q1131-33	2SC2412K/QR/-X	SI.TRANSISTOR			
	Q1153-54	DTC124EKA-X	DIGI.TRANSISTOR			
	Q1232-33	2SC2412K/QR/-X	SI.TRANSISTOR			
	Q1352	2SC2412K/QR/-X	SI.TRANSISTOR			
	Q1431	2SC2412K/QR/-X	SI.TRANSISTOR			
	Q1440	2SC2412K/QR/-X	SI.TRANSISTOR			
	Q1501	2SC4212/Z1/	SI.TRANSISTOR			
⚠	Q1511	2SD2634-YD	SI.TRANSISTOR	H.OUT		
	Q1531	2SC2785/JH/-T	SI.TRANSISTOR			
	Q1532	2SA1037AK/QR/-X	SI.TRANSISTOR			
	Q1541-42	2SA1037AK/QR/-X	SI.TRANSISTOR			
⚠	Q1543	2SD1408/OY/-LB	SI.TRANSISTOR			
	Q1700	2SC2412K/QR/-X	SI.TRANSISTOR			
	Q1701	2SA1037AK/QR/-X	SI.TRANSISTOR			
	Q1703	2SA1037AK/QR/-X	SI.TRANSISTOR			

⚠	Symbol No.	Part No.	Part Name	Description	Local
	TRANSISTOR				
	Q1705	2SA1037AK/QR/-X	SI.TRANSISTOR		
	Q1706	2SC2412K/QR/-X	SI.TRANSISTOR		
	Q1711	DTC124EKA-X	DIGI.TRANSISTOR		
	Q1810	DTC144EKA-X	DIGI.TRANSISTOR		
	Q1941	2SC2412K/QR/-X	SI.TRANSISTOR		
	Q1951	2SD1383K/AB/-X	SI.TRANSISTOR		
	Q1971	2SA1123/R/Z1-T	SI.TRANSISTOR		
	IC				
	IC1101	TB1253N	I.C.(M)		
	IC1151	TC4066BF/N/-XE	I.C.(DIGI-MOS)		
⚠	IC1401	LA7841	I.C.(MONO-ANA)		
	IC1601	M52055FP-X	I.C.(MONO-ANA)		
	IC1651	PQ3RD13	I.C.(MONO-ANA)		
	IC1701	MN1876478JJ	I C		
	IC1702	AT24C04-27F802	I.C.(MEMORY-OTH)	(SERVICE)	
	IC1703	MM1437AF-X	I.C.(MONO-ANA)		
	IC1851	AN7812F	I.C.(MONO-ANA)		
	IC1852	AN7809F	I.C.(MONO-ANA)		
	IC1853	AN7805F	I.C.(MONO-ANA)		
	IC1911	STR-F6626/F3	I C		
⚠	IC1921	SE135N	I.C.(HYBRID)		
	OTHERS				
	CF1001	QAX0349-001	CERAMIC FILTER		
	CF1021	QAX0639-001Z	CERAMIC FILTER		
	CF1041	QAX0642-001Z	CERAMIC FILTER		
	CL1004	CM47653-001	P.W.B.HOLDER		
⚠	CP1932	ICP-N75-Y	I.C.PROTECT		
⚠	CP1933	ICP-N75-Y	I.C.PROTECT		
⚠	CP1934	ICP-N75-Y	I.C.PROTECT		
⚠	CP1936	ICP-N75-Y	I.C.PROTECT		
⚠	F1905	QMFZ034-5R0Z-J1	FUSE	5A	
⚠	FR1521	QRK129J-150	C R	15Ω 1/2W	J
⚠	FR1523-24	QRX029J-3R3	MF R	3.3Ω 2W	J
⚠	FR1525	QRZ9017-4R7	F R	4.7Ω 1/2W	
	J1601-02	QNN0349-002	PIN JACK		
	J1810	QNS0001-001	JACK		
	K1401	QQR0621-002Z	BEADS CORE		
	K1912	QQR0582-001Z	BEADS CORE		
	K1916-17	QQR0582-001Z	BEADS CORE		
	K1920	QQR0872-002	FERRITE BEADS		
	K1931-33	QQR0582-001Z	BEADS CORE		
	K1935	QQR0582-001Z	BEADS CORE		
	K1937	QQR0582-001Z	BEADS CORE		
	LC1601-06	NQR0169-001X	EMIFILTER		
⚠	PC1921	TLP621(B)	I.C.(PH.COUPLER)		
⚠	RY1941	QSK0120-001	RELAY		
⚠	RY1951	QSK0113-001	RELAY		
	SF1011	QAX0324-002	SAW FILTER		
⚠	TH1901	CEKP007-002	P.THERMISTOR		
⚠	TU1001	QAU0134-001	TUNER		
	X1201	CE40668-001Z	CRYSTAL		
	X1700	QAX0307-001	CER.RESONATOR		

DAF PW BOARD ASS'Y (SAC-2601A-M2)

⚠	Symbol No.	Part No.	Part Name	Description	Local
	RESISTOR				
	R2701	QRG01GJ-220	OM R	22Ω 1W	J
	R2702	QRE121J-123Y	C R	12kΩ 1/2W	J
	R2703	QRZ0056-103Z	COMP.R	10Ω	
	R2751	NRSA63J-683X	MG R	68kΩ 1/16W	J

⚠	Symbol No.	Part No.	Part Name	Description	Local
	RESISTOR				
	R2752	NRSA63J-822X	MG R	8.2kΩ 1/16W	J
	R2753	NRSA63J-122X	MG R	1.2kΩ 1/16W	J
	R2754	NRSA63J-103X	MG R	10kΩ 1/16W	J
	R2755	NRSA63J-563X	MG R	56kΩ 1/16W	J
	R2756	NRSA63J-123X	MG R	12kΩ 1/16W	J
	R2757	NRSA63J-472X	MG R	4.7kΩ 1/16W	J
	R2758	NRSA63J-124X	MG R	120kΩ 1/16W	J
	R2761-65	QRE121J-184Y	C R	180kΩ 1/2W	J
	R2771	QRL039J-223	OM R	22kΩ 3W	J
	CAPACITOR				
	C2701	QFV71HJ-124Z	MF CAP.	0.12µF 50V	J
	C2751	QFLC1HJ-563Z	M CAP.	0.056µF 50V	J
	C2752	QETN1EM-476Z	E CAP.	47µF 25V	M
	C2753	QFZ0122-103	MPP CAP.		
	C2761	QFZ0122-682	M.PP CAPACITOR		
	C2771	QETN1HM-106Z	E CAP.	10µF 50V	M
	TRANSFORMER				
	T2701	QQR1153-001	DEF.TRANSF.		
	COIL				
	L2701	QQLZ028-272	CHOKE COIL		
	DIODE				
	D2761-62	ES1F-LFG2	SI.DIODE		
	D2771	MA3300/M/-X	CHIP ZENER DIODE		
	TRANSISTOR				
	Q2751-52	2SC2412K/QR/-X	SI.TRANSISTOR		
	Q2753	2SC4632	SI.TRANSISTOR		

CRT SOCKET PW BOARD ASS'Y (SAC-3501A-M2)

⚠	Symbol No.	Part No.	Part Name	Description	Local
	RESISTOR				
	R3108	NRSA63J-0R0X	MG R	0.0Ω 1/16W	J
	R3111	NRSA63J-332X	MG R	3.3kΩ 1/16W	J
	R3114	QRJ146J-100X	C R	10Ω 1/4W	J
	R3115-16	NRSA63J-470X	MG R	47Ω 1/16W	J
	R3117	NRSA63J-102X	MG R	1kΩ 1/16W	J
	R3119	NRSA63J-680X	MG R	68Ω 1/16W	J
	R3122	QRZ9021-561	F R		
	R3123	NRSA63J-122X	MG R	1.2kΩ 1/16W	J
	R3124	NRSA63J-390X	MG R		
	R3125	NRSA63J-5R6X	MG R		
	R3126-27	NRSA63J-563X	MG R	56kΩ 1/16W	J
	R3128	NRSA63J-122X	MG R	1.2kΩ 1/16W	J
	R3129	NRSA63J-5R6X	MG R		
	R3130	NRSA63J-390X	MG R		
	R3131	NRSA63J-121X	MG R	120Ω 1/16W	J
	R3132	QRL029J-391	OM R	390Ω 2W	J
	R3134	NRSA63J-152X	MG R	1.5kΩ 1/16W	J
	R3136	NRSA63J-333X	MG R	33kΩ 1/16W	J
	R3139	NRSA63J-681X	MG R	680Ω 1/16W	J
	R3142	NRSA63J-124X	MG R	120kΩ 1/16W	J
	R3143	NRSA63J-681X	MG R	680Ω 1/16W	J
	R3145-46	NRSA63J-5R6X	MG R		
	R3151	NRSA63J-473X	MG R	47kΩ 1/16W	J
	R3152-53	NRSA63J-683X	MG R	68kΩ 1/16W	J

⚠	Symbol No.	Part No.	Part Name	Description	Local
	RESISTOR				
	R3154	NRSA63J-473X	MG R	47kΩ 1/16W	J
	R3301-06	NRSA63J-151X	MG R	150Ω 1/16W	J
	R3307-09	NRSA63J-100X	MG R	10Ω 1/16W	J
	R3310-12	QRG029J-153	OM R	15kΩ 2W	J
	R3313-15	QRG029J-183	OM R	18kΩ 2W	J
	R3316-18	NRSA63J-0R0X	MG R	0.0Ω 1/16W	J
	R3325-27	QRC121K-102Z	COMP.R	1kΩ 1/2W	K
	R3331-33	NRSA63J-122X	MG R	1.2kΩ 1/16W	J
	R3334	NRSA63J-152X	MG R	1.5kΩ 1/16W	J
	R3335	NRSA63J-391X	MG R	390Ω 1/16W	J
	R3336-38	NRSA63J-0R0X	MG R	0.0Ω 1/16W	J
	R3351-53	NRSA63J-102X	MG R	1kΩ 1/16W	J
	R3354	NRSA63J-561X	MG R	560Ω 1/16W	J
	R3355	NRSA63J-563X	MG R	56kΩ 1/16W	J
	R3361	QRC121K-105Z	COMP.R	1MΩ 1/2W	K
	R3362	QRC121K-102Z	COMP.R	1kΩ 1/2W	K
	R3363	QRC121K-474Z	COMP.R	470kΩ 1/2W	K
	CAPACITOR				
	C3101	QETN1HM-106Z	E CAP.	10µF 50V	M
	C3109	QETN1CM-107Z	E CAP.	100µF 16V	M
	C3110-11	NDC31HJ-221X	C CAP.	220pF 50V	J
	C3113	QETN2CM-106Z	E CAP.	10µF 160V	M
	C3114-15	QCB32HK-472Z	C CAP.	4700pF 500V	K
	C3117	QETN2CM-106Z	E CAP.	10µF 160V	M
	C3118	QETN0JM-107Z	E CAP.	100µF 6.3V	M
	C3119	QETN1AM-107Z	E CAP.	100µF 10V	M
	C3120	QETN1AM-337Z	E CAP.	330µF 10V	M
	C3121	QCS32HJ-151Z	C CAP.	150pF 500V	J
	C3122	NDC31HJ-5R0X	C CAP.	5.0pF 50V	J
	C3125	NRSA63J-0R0X	MG R	0.0Ω 1/16W	J
	C3151-52	NCB21EK-104X	C CAP.	0.1µF 25V	K
	C3301-03	NDC31HJ-471X	C CAP.	470pF 50V	J
	C3321-22	QETN2EM-105Z	E CAP.	1µF 250V	M
	C3323	QETN1CM-477Z	E CAP.	470µF 16V	M
	C3331-33	NDC31HJ-561X	C CAP.	560pF 50V	J
	C3351	QETN1CM-337Z	E CAP.	330µF 16V	M
	C3361	QETN2EM-105Z	E CAP.	1µF 250V	M
	C3363	QCZ0324-102	C CAP.		
	COIL				
	L3301-03	QQL244K-180Z	COIL	18µH	K
	L3304-06	QQL244K-470Z	COIL	47µH	K
	DIODE				
	D3101	1SS355-X	SI.DIODE		
	D3105-06	RH1S-T3	SI.DIODE		
	D3301-03	1SS355-X	SI.DIODE		
	D3304-06	1SS82-T2	SI.DIODE		
	D3331	1SS355-X	SI.DIODE		
	D3351	1SS355-X	SI.DIODE		
	D3361	RM2C-LFA1	SI.DIODE		
	TRANSISTOR				
	Q3103	2SA933AS/QR/-T	SI.TRANSISTOR		
	Q3105	2SC1740S/QR/-T	SI.TRANSISTOR		
	Q3106	2SA933AS/QR/-T	SI.TRANSISTOR		
	Q3107	2SA1964/DE/	SI.TRANSISTOR		
	Q3108	2SC5248/DE/	SI.TRANSISTOR		
	Q3109	2SC1740S/QR/-T	SI.TRANSISTOR		
	Q3151	2SC1740S/QR/-T	SI.TRANSISTOR		
	Q3152	2SA933AS/QR/-T	SI.TRANSISTOR		
	Q3301-03	2SC5083/L-P/-T	SI.TRANSISTOR		
	Q3304-06	2SC5147/CDE/F43	SI.TRANSISTOR		
	Q3351	2SA933AS/QR/-T	SI.TRANSISTOR		

FRONT PW BOARD ASS'Y (SAC-8501A-M2)

⚠	Symbol No.	Part No.	Part Name	Description	Local
	OTHERS				
	K3102-05	CE41492-001Z	CHOKE COIL		
⚠	SK3001	CE42670-001	C.R.T.SOCKET		
	RESISTOR				
	R8401	NRSA63J-750X	MG R	75Ω 1/16W	J
	R8402-03	NRSA63J-224X	MG R	220kΩ 1/16W	J
	R8404-05	NRSA63J-750X	MG R	75Ω 1/16W	J
	R8406	NRSA63J-333X	MG R	33kΩ 1/16W	J
	R8702	NRSA63J-472X	MG R	4.7kΩ 1/16W	J
	R8703	NRSA63J-153X	MG R	15kΩ 1/16W	J
	R8705	NRSA63J-472X	MG R	4.7kΩ 1/16W	J
	R8706	NRSA63J-153X	MG R	15kΩ 1/16W	J
	CAPACITOR				
	C8442-43	QETN1HM-105Z	E CAP.	1µF 50V	M
	C8444-45	QETN1HM-474Z	E CAP.	0.47µF 50V	M
	C8446	NCB31HK-103X	C CAP.	0.01µF 50V	K
	DIODE				
	D8402-06	UDZS10B-X	ZENER DIODE		
	OTHERS				
	J8401	QNZ0453-001	JACK		
	LC8401-02	NQR0169-001X	EMI FILTER		
	S8702	QSW0619-003Z	PUSH SWITCH	MENU	
	S8703	QSW0619-003Z	PUSH SWITCH	CH-	
	S8704	QSW0619-003Z	PUSH SWITCH	CH+	
	S8705	QSW0619-003Z	PUSH SWITCH	VOL-	
	S8706	QSW0619-003Z	PUSH SWITCH	VOL+	

POWER SW PW BOARD ASS'Y (SAC-8601A-M2)

⚠	Symbol No.	Part No.	Part Name	Description	Local
	RESISTOR				
	R8101	NRSA63J-561X	MG R	560Ω 1/16W	J
	R8107	NRSA63J-332X	MG R	3.3kΩ 1/16W	J
	R8108	NRSA63J-152X	MG R	1.5kΩ 1/16W	J
	CAPACITOR				
	C8102	QETN1EM-476Z	E CAP.	47µF 25V	M
	DIODE				
	D8101	SLR-342VR3F	L.E.D.		
	TRANSISTOR				
	Q8101-02	DTA124EKA-X	DIGI.TRANSISTOR		
	IC				
	IC8101	GP1U281Q	IFR DETECT UNIT		

LF PW BOARD ASS'Y (SAC-9501A-M2)

⚠	Symbol No.	Part No.	Part Name	Description	Local
	OTHERS				
		LC30190-001B-A	L.E.D.HOLDER		
	S8701	QSW0847-001	TACT SWITCH	POWER	
	RESISTOR				
	R9997	QRE121J-5R6Y	C R	5.6Ω 1/2W	J
⚠	R9998	QRZ9041-275	C R		
	R9999	QRE121J-121Y	C R	120Ω 1/2W	J
	CAPACITOR				
⚠	C9901	QFZ9067-104	MM CAP.		
⚠	C9902	QFZ9067-473	MM CAP.		
⚠	C9903	QFZ9067-104	MM CAP.		
⚠	C9904	QCZ9052-102	C CAP.		
	OTHERS				
⚠	CN90PW	QMPD200-200-JC	POWER CORD		
⚠	F9901	QMF0007-5R0J1	FUSE	5A	
	FC9901	CEMG002-001Z	FUSE CLIP	(x2)	
⚠	LF9901	QQR0527-004	LINE FILTER		
⚠	LF9902	QQR1159-001	LINE FILTER		
⚠	VA9901	ERZV10V621CS	VARISTOR		

PIP PW BOARD ASS'Y (SAC0P501A-M2)

⚠	Symbol No.	Part No.	Part Name	Description	Local
	RESISTOR				
	R0001-02	NRSA63J-103X	MG R	10kΩ 1/16W	J
	R0003-04	NRSA63J-101X	MG R	100Ω 1/16W	J
	R0005	NRSA63J-0R0X	MG R	0.0Ω 1/16W	J
	R0011	NRSA63J-0R0X	MG R	0.0Ω 1/16W	J
	R0121	NRSA63J-0R0X	MG R	0.0Ω 1/16W	J
	R0301	NRSA63J-473X	MG R	47kΩ 1/16W	J
	R0303	NRSA63J-222X	MG R	2.2kΩ 1/16W	J
	R0304	NRSA63J-473X	MG R	47kΩ 1/16W	J
	R0306	NRSA63J-222X	MG R	2.2kΩ 1/16W	J
	R0307-08	NRSA63J-332X	MG R	3.3kΩ 1/16W	J
	R0309	NRSA63J-102X	MG R	1kΩ 1/16W	J
	R0311	NRSA63J-101X	MG R	100Ω 1/16W	J
	R0313	NRSA63J-101X	MG R	100Ω 1/16W	J
	R0314	NRSA63J-0R0X	MG R	0.0Ω 1/16W	J
	R0316	NRSA63J-331X	MG R	330Ω 1/16W	J
	R0317	NRSA63J-0R0X	MG R	0.0Ω 1/16W	J
	R0331	NRSA63J-0R0X	MG R	0.0Ω 1/16W	J
	R0337	NRSA63J-0R0X	MG R	0.0Ω 1/16W	J
	R0343	NRSA63J-0R0X	MG R	0.0Ω 1/16W	J
	CAPACITOR				
	C0003-04	QETN1HM-106Z	E CAP.	10µF 50V	M
	C0006	QETN1HM-106Z	E CAP.	10µF 50V	M
	C0008	QETN1EM-476Z	E CAP.	47µF 25V	M
	C0301-02	NRSA63J-0R0X	MG R	0.0Ω 1/16W	J
	C0312-13	NDC31HJ-270X	C CAP.	27pF 50V	J
	C0314	QETN1HM-106Z	E CAP.	10µF 50V	M
	C0315	NCB31HK-103X	C CAP.	0.01µF 50V	K
	C0316-18	NCB21HK-104X	CHIP CAP.	0.1µF 50V	K
	C0319	QETN1HM-106Z	E CAP.	10µF 50V	M
	C0320	NCB31HK-103X	C CAP.	0.01µF 50V	K
	C0321	QETN1HM-105Z	E CAP.	1µF 50V	M
	C0322	NCB31HK-103X	C CAP.	0.01µF 50V	K
	C0323	QETN1HM-106Z	E CAP.	10µF 50V	M
	C0324-25	NCB31HK-103X	C CAP.	0.01µF 50V	K
	C0326	NCB21HK-104X	CHIP CAP.	0.1µF 50V	K
	C0327	QETN1HM-225Z	E CAP.	2.2µF 50V	M
	C0328	NCB31HK-103X	C CAP.	0.01µF 50V	K
	C0329	QETN1HM-225Z	E CAP.	2.2µF 50V	M
	C0330	NCB31HK-103X	C CAP.	0.01µF 50V	K
	C0331	NCB21HK-104X	CHIP CAP.	0.1µF 50V	K
	COIL				
	L0302-04	QQL244J-6R8Z	COIL	6.8µH	
	DIODE				
	D0301	1SS133-T2	SI.DIODE		
	TRANSISTOR				
	Q0301-03	2SC2412K/QR/-X	SI.TRANSISTOR		
	IC				
	IC0001	AN7805F	I.C.(MONO-ANA)		
	IC0301	SDA9389X-X	I.C.(DIGI-MOS)		
	OTHERS				
⚠	TU0001	QAU0206-001	TUNER		

AV SW PW BOARD ASS'Y (SAC0S501A-M2)

⚠	Symbol No.	Part No.	Part Name	Description	Local
	RESISTOR				
	R0081	NRSA63J-102X	MG R	1kΩ 1/16W	J
	R0082	NRSA63J-682X	MG R	6.8kΩ 1/16W	J
	R0083	NRSA63J-153X	MG R	15kΩ 1/16W	J
	R0084	NRSA63J-683X	MG R	68kΩ 1/16W	J
	R0085	NRSA63J-332X	MG R	3.3kΩ 1/16W	J
	R0086	NRSA63J-333X	MG R	33kΩ 1/16W	J
	R0087	NRVA02D-153X	MF R	15kΩ 1/10W	D
	R0088	NRVA02D-152X	MF R	1.5kΩ 1/10W	D
	R0089	NRSA63J-562X	MG R	5.6kΩ 1/16W	J
	R0090	NRSA63J-563X	MG R	56kΩ 1/16W	J
	R0151-54	NRSA63J-223X	MG R	22kΩ 1/16W	J
	R0155	NRSA63J-0R0X	MG R	0.0Ω 1/16W	J
	R0157	NRSA63J-0R0X	MG R	0.0Ω 1/16W	J
	R0159	NRSA63J-103X	MG R	10kΩ 1/16W	J
	R0202	NRSA63J-101X	MG R	100Ω 1/16W	J
	R0301-02	NRSA63J-222X	MG R	2.2kΩ 1/16W	J
	R0303-04	NRSA63J-221X	MG R	220Ω 1/16W	J
	R0305-06	NRSA63J-0R0X	MG R	0.0Ω 1/16W	J
	R0331-34	NRSA63J-101X	MG R	100Ω 1/16W	J
	R0371-74	NRSA63J-103X	MG R	10kΩ 1/16W	J
	R0375-76	NRSA63J-333X	MG R	33kΩ 1/16W	J
	R0377-78	NRSA63J-472X	MG R	4.7kΩ 1/16W	J
	R0381	NRSA63J-682X	MG R	6.8kΩ 1/16W	J
	R0382	NRSA63J-223X	MG R	22kΩ 1/16W	J
	R0384-87	NRSA63J-223X	MG R	22kΩ 1/16W	J
	R0391-92	NRSA63J-221X	MG R	220Ω 1/16W	J
	R0393-94	NRSA63J-823X	MG R	82kΩ 1/16W	J
	R0395-96	NRSA63J-221X	MG R	220Ω 1/16W	J
	R0401	NRSA63J-183X	MG R	18kΩ 1/16W	J
	R0402	NRSA63J-223X	MG R	22kΩ 1/16W	J
	R0458	NRSA63J-333X	MG R	33kΩ 1/16W	J
	R0459	NRSA63J-183X	MG R	18kΩ 1/16W	J

⚠	Symbol No.	Part No.	Part Name	Description	Local
RESISTOR					
	R0501-02	NRSA63J-102X	MG R	1kΩ 1/16W	J
	R0503	NRSA63J-221X	MG R	220Ω 1/16W	J
	R0504-05	NRSA63J-102X	MG R	1kΩ 1/16W	J
	R0507-08	NRSA63J-102X	MG R	1kΩ 1/16W	J
	R0509	NRSA63J-221X	MG R	220Ω 1/16W	J
	R0510-11	NRSA63J-102X	MG R	1kΩ 1/16W	J
	R0518	NRSA63J-333X	MG R	33kΩ 1/16W	J
	R0519-21	NRSA63J-750X	MG R	75Ω 1/16W	J
	R0522-23	NRSA63J-224X	MG R	220kΩ 1/16W	J
	R0527	NRSA63J-750X	MG R	75Ω 1/16W	J
	R0528-29	NRSA63J-0R0X	MG R	0.0Ω 1/16W	J
	R0532-35	NRSA63J-224X	MG R	220kΩ 1/16W	J
	R0558-61	NRSA63J-0R0X	MG R	0.0Ω 1/16W	J
	R0564-65	NRSA63J-0R0X	MG R	0.0Ω 1/16W	J
	R0566-67	NRSA63J-331X	MG R	330Ω 1/16W	J
	R0568	NRSA63J-0R0X	MG R	0.0Ω 1/16W	J
	R0571	NRSA63J-101X	MG R	100Ω 1/16W	J
	R0573	NRSA63J-272X	MG R	2.7kΩ 1/16W	J
	R0901	NRSA63J-101X	MG R	100Ω 1/16W	J
	R0906	NRSA63J-0R0X	MG R	0.0Ω 1/16W	J
CAPACITOR					
	C0081	NCB21HK-104X	CHIP CAP.	0.1µF 50V	K
	C0082	QENC1HM-475Z	BP E CAP.	4.7µF 50V	M
	C0083	QENC1HM-105Z	BP E CAP.	1µF 50V	M
	C0084	QETN1HM-225Z	E CAP.	2.2µF 50V	M
	C0085	NCB21HK-473X	C CAP.	0.047µF 50V	K
	C0086	QETN1HM-474Z	E CAP.	0.47µF 50V	M
	C0087-88	NCB21HK-104X	CHIP CAP.	0.1µF 50V	K
	C0089	QBTC1CK-335Z	TAN.CAP.	3.3µF 16V	K
	C0090	QETN1HM-105Z	E CAP.	1µF 50V	M
	C0091	QBTC1CK-106Z	TAN.CAP.	10µF 16V	K
	C0092-93	QETN1HM-105Z	E CAP.	1µF 50V	M
	C0094	QETN1HM-475Z	E CAP.	4.7µF 50V	M
	C0095	QETN1HM-105Z	E CAP.	1µF 50V	M
	C0151-52	QENC1HM-105Z	BP E CAP.	1µF 50V	M
	C0153-54	NCB31HK-332X	CHIP CAP.	3300pF 50V	K
	C0155-56	NCB21HK-333X	C CAP.	0.033µF 50V	K
	C0157-58	QETN1HM-106Z	E CAP.	10µF 50V	M
	C0159	QETN1EM-476Z	E CAP.	47µF 25V	M
	C0160	NCB21HK-104X	CHIP CAP.	0.1µF 50V	K
	C0309-10	NCB31HK-102X	C CAP.	1000pF 50V	K
	C0311-12	NRSA63J-0R0X	MG R	0.0Ω 1/16W	J
	C0331	QETN1CM-107Z	E CAP.	100µF 16V	M
	C0332	NCB31HK-103X	C CAP.	0.01µF 50V	K
	C0333	QETN1EM-476Z	E CAP.	47µF 25V	M
	C0334	NCB21HK-273X	C CAP.	0.027µF 50V	K
	C0335	QETN1HM-225Z	E CAP.	2.2µF 50V	M
	C0336	NCB31HK-222X	CHIP CAP.	2200pF 50V	K
	C0337	NCB21HK-104X	CHIP CAP.	0.1µF 50V	K
	C0338	QETN1HM-225Z	E CAP.	2.2µF 50V	M
	C0339	NCB31HK-222X	CHIP CAP.	2200pF 50V	K
	C0340	NCB21HK-104X	CHIP CAP.	0.1µF 50V	K
	C0343	QETN1HM-105Z	E CAP.	1µF 50V	M
	C0344-45	QENC1HM-225Z	BP E CAP.	2.2µF 50V	M
	C0371-72	QENC1HM-105Z	BP E CAP.	1µF 50V	M
	C0373	QETN1EM-476Z	E CAP.	47µF 25V	M
	C0391-92	QETN1HM-474Z	E CAP.	0.47µF 50V	M
	C0401	QETN1CM-107Z	E CAP.	100µF 16V	M
	C0402-03	NCF21CZ-105X	C CAP.	1µF 16V	Z
	C0404	QFV71HJ-224Z	MF CAP.	0.22µF 50V	J
	C0407	QETN1EM-108Z	E CAP.	1000µF 25V	M
	C0410-11	QETN1EM-108Z	E CAP.	1000µF 25V	M
	C0412-13	QETN1HM-105Z	E CAP.	1µF 50V	M
	C0501-02	NCB31HK-103X	C CAP.	0.01µF 50V	K
	C0503	QETN1HM-226Z	E CAP.	22µF 50V	M
	C0504	QETN1EM-476Z	E CAP.	47µF 25V	M
	C0505	QENC1HM-474Z	BP E CAP.	0.47µF 50V	M
	C0508	QETN1HM-474Z	E CAP.	0.47µF 50V	M
	C0509	NCB31HK-103X	C CAP.	0.01µF 50V	K
	C0511	QETN1HM-474Z	E CAP.	0.47µF 50V	M
	C0512-13	QETN1HM-105Z	E CAP.	1µF 50V	M
	C0517	QETN1HM-474Z	E CAP.	0.47µF 50V	M

⚠	Symbol No.	Part No.	Part Name	Description	Local
CAPACITOR					
	C0520-23	QETN1HM-105Z	E CAP.	1µF 50V	M
	C0533-34	NCB31HK-103X	C CAP.	0.01µF 50V	K
	C0538-39	NCB31HK-103X	C CAP.	0.01µF 50V	K
COIL					
	L0001-02	QRN143J-0R0X	C R	0.0Ω 1/4W	J
DIODE					
	D0391-92	UDZS10B-X	ZENER DIODE		
	D0501-05	UDZS10B-X	ZENER DIODE		
	D0507-09	UDZS10B-X	ZENER DIODE		
	D0511	UDZS10B-X	ZENER DIODE		
	D0515-19	UDZS10B-X	ZENER DIODE		
	D0521	UDZS10B-X	ZENER DIODE		
	D0527-28	UDZS10B-X	ZENER DIODE		
TRANSISTOR					
	Q0301-02	DTC124EKA-X	DIGI.TRANSISTOR		
	Q0381-82	DTC124EKA-X	DIGI.TRANSISTOR		
	Q0384-87	DTC323TK-X	DIGI.TRANSISTOR		
	Q0453	2SC2412K/QR/-X	SI.TRANSISTOR		
	Q0454	DTC124EKA-X	DIGI.TRANSISTOR		
	Q0509	2SC2412K/QR/-X	SI.TRANSISTOR		
IC					
	IC0001	UPC1851BCU	I.C.(MONO-ANA)		
	IC0151	NJM2150AD	I.C.(MONO-ANA)		
	IC0371	BA15218N	I.C.(MONO-ANA)		
	IC0381	TC4066BP/N/	I.C.(DIGI-MOS)		
	IC0401	LA4485	I.C.(MONO-ANA)		
	IC0501	CXA2089Q-X	I.C.(MONO-ANA)		
OTHERS					
	J0501	QNZ0454-001	PIN JACK		
	J0502	QNN0349-001	PIN JACK		
	J0503-04	QNN0348-001	PIN JACK		

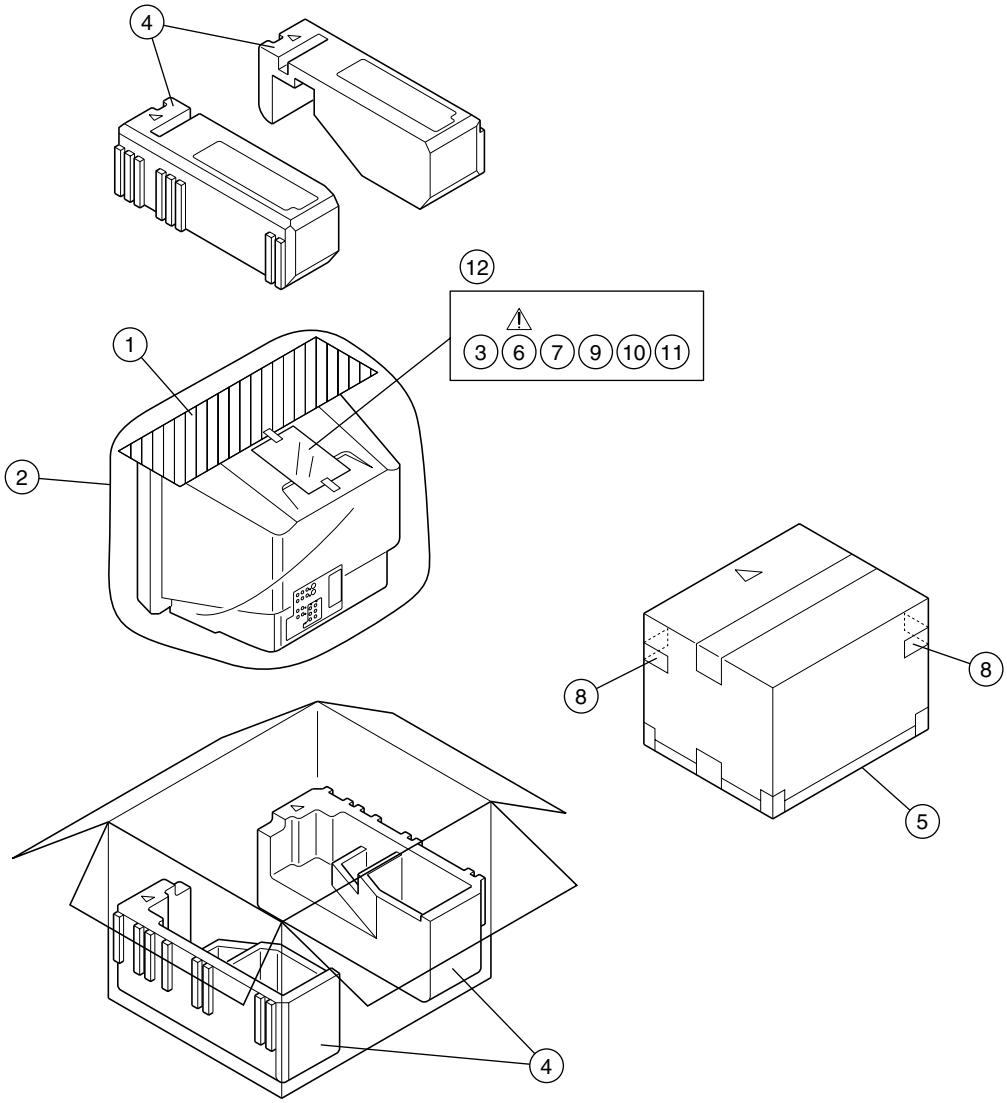
3D Y/C MODULE PW BOARD ASSY (SAC-0Y501A)

⚠	Symbol No.	Part No.	Part Name	Description	Local
OTHERS					
		SAC-0Y501A	3D Y/C MODULE		

REMOTE CONTROL UNIT PARTS LIST (RM-C301G-1A)

⚠	Ref.No.	Part No.	Part Name	Description	Local
		UR52EC1286C	BATTERY COVER		

PACKING



PACKING PARTS LIST

⚠	Ref.No.	Part No.	Part Name	Description	Local
	1	CP30055-001-A	TOP COVER		
	2	CP30056-008-A	POLY BAG		
	3	RM-C301G-1A	RC HAND UNIT		
	4	LC10884-002A-A	CUSHION ASSY	4pcs in 1set	
	5	LC10181-025A-A	PACKING CASE		
⚠	6	LCT0821-001A-A	INST BOOK	[ENGLISH]	
	7	LCT0822-001A-A	SETUP GUIDE		
	8	CM36616-001-A	CORNER LABEL	2pcs in 1set	
	9	BT-51020-1Q	REGISTER CARD		
	10	BT-20071B-Q	SVC CENTER LIST		
	11	BT-52004-1Q	WARRANTY CARD		
	12	QPA02503505	POLY BAG		

AV-27F802 STANDARD CIRCUIT DIAGRAM

■ NOTE ON USING CIRCUIT DIAGRAMS

1. SAFETY

The components identified by the ⚠ symbol and shading are critical for safety. For continued safety replace safety critical components only with manufactures recommended parts.

2. SPECIFIED VOLTAGE AND WAVEFORM VALUES

The voltage and waveform values have been measured under the following conditions.

(1) Input signal : Color bar signal
(2) Setting positions of each knob/button and variable resistor : Original setting position when shipped
(3) Internal resistance of tester : DC 20kΩ/V
(4) Oscilloscope sweeping time : H ⇒ 20μS/div
: V ⇒ 5mS/div
: Others ⇒ Sweeping time is specified
(5) Voltage values : All DC voltage values

∗Since the voltage values of signal circuit vary to some extent according to adjustments, use them as reference values.

3. INDICATION OF PARTS SYMBOL [EXAMPLE]

● In the PW board : R1209 → R209

4. INDICATIONS ON THE CIRCUIT DIAGRAM

(1) Resistors

● Resistance value

No unit	: [Ω]
K	: [KΩ]
M	: [MΩ]

● Rated allowable power

No indication	: 1/10 [W]
Others	: As specified

● Type

No indication	: Carbon resistor
OMR	: Oxide metal film resistor
MFR	: Metal film resistor
MPR	: Metal plate resistor
UNFR	: Uninflammable resistor
FR	: Fusible resistor

∗Composition resistor 1/2 [W] is specified as 1/2S or Comp.

(2) Capacitors

● Capacitance value

1 or higher	: [pF]
less than 1	: [μF]

● Withstand voltage

No indication	: DC50[V]
AC indicated	: AC withstand voltage [V]
Others	: DC withstand voltage [V]

∗ Electrolytic Capacitors
47/50[Example] : Capacitance value [μF]/withstand voltage[V]

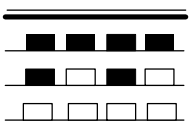
● Type

No indication	: Ceramic capacitor
MY	: Mylar capacitor
MM	: Metalized mylar capacitor
PP	: Polypropylene capacitor
MPP	: Metalized polypropylene capacitor
MF	: Metalized film capacitor
TF	: Thin film capacitor
BP	: Bipolar electrolytic capacitor
TAN	: Tantalum capacitor

(3) Coils

No unit	: [μH]
Others	: As specified

(4) Power Supply



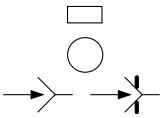
: B1
: B2(12V)
: 9V
: 5V

∗Respective voltage values are indicated

(5) Test point

: Test point
: Only test point display

(6) Connecting method



: Connector
: Wrapping or soldering
: Receptacle

(7) Ground symbol

⊥ : LIVE side ground
⏚ : ISOLATED(NEUTRAL) side ground
⏚ : EARTH ground
▽ : DIGITAL ground

5. NOTE FOR REPAIRING SERVICE

This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (⊥) side GND and the ISOLATED(NEUTRAL) : (⏚) side GND. Therefore, care must be taken for the following points.

(1) Do not touch the LIVE side GND or the LIVE side GND and the ISOLATED(NEUTRAL) side GND simultaneously. If the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.
(2) Do not short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or never measure with a measuring apparatus (oscilloscope, etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND at the same time. If the above precaution is not respected , a fuse or any parts will be broken.

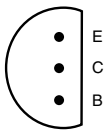
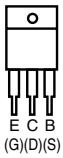
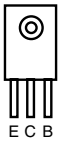
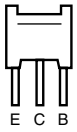
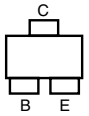
● Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.

Sep. 2000 No. 51757

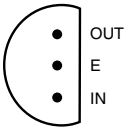
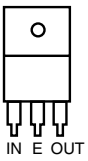
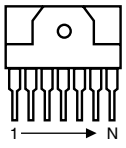
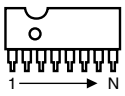
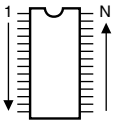
CONTENTS

SEMICONDUCTOR SHAPES

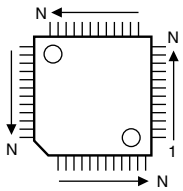
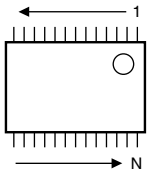
TRANSISTOR

BOTTOM VIEW	FRONT VIEW				TOP VIEW
					CHIP TR 

IC

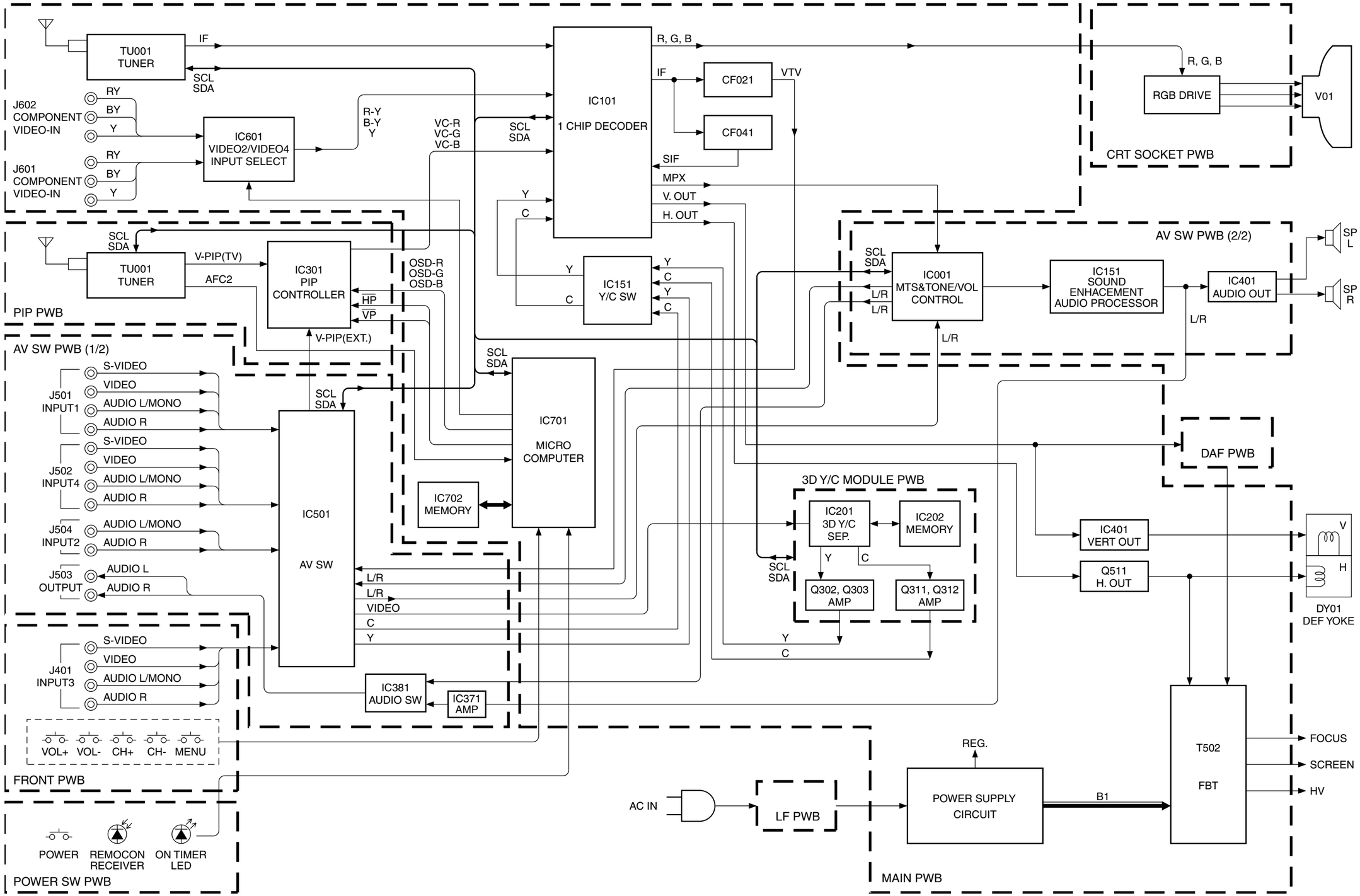
BOTTOM VIEW	FRONT VIEW			TOP VIEW
				

CHIP IC

TOP VIEW		
		

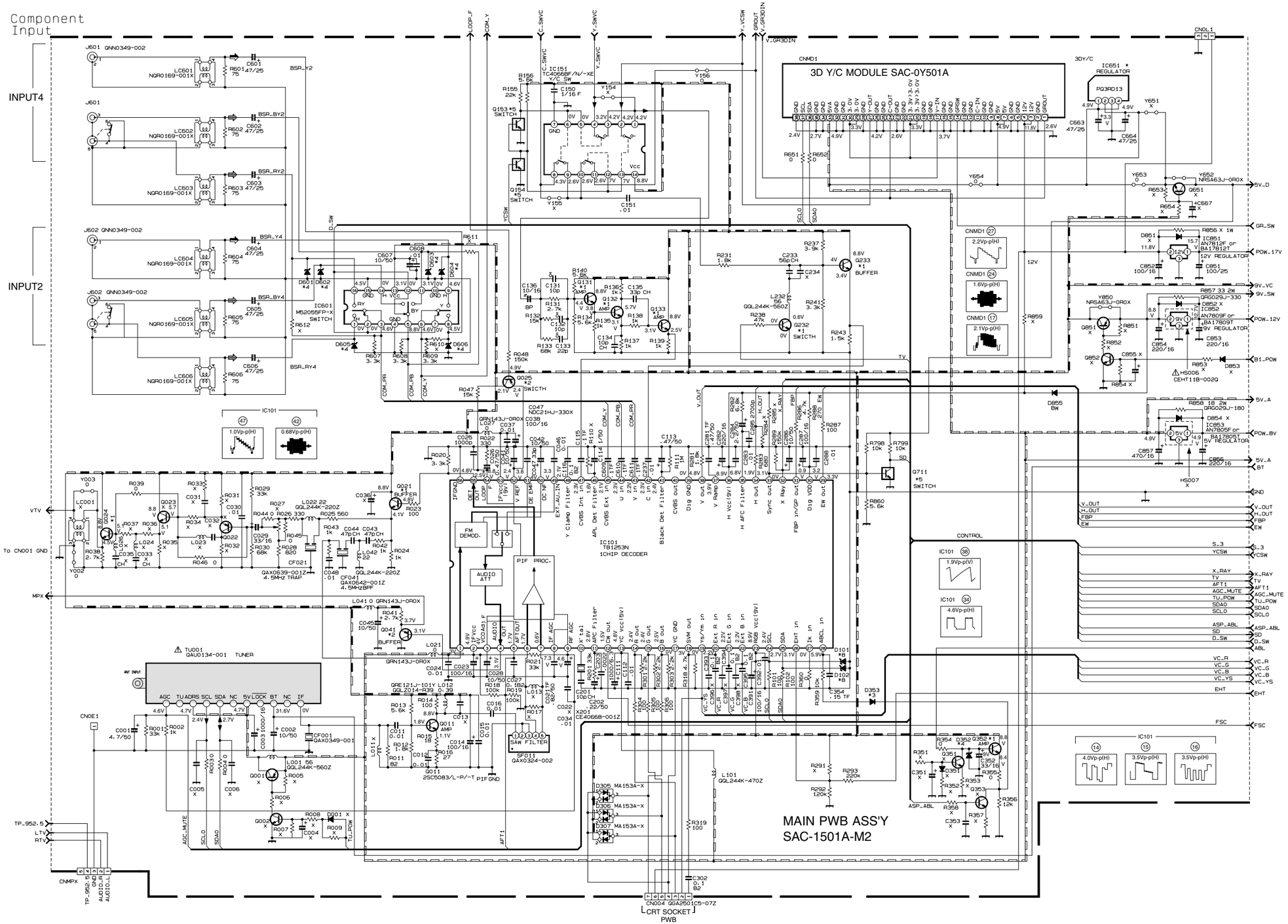
BLOCK DIAGRAM

AV-27F802 BLOCK DIAGRAM

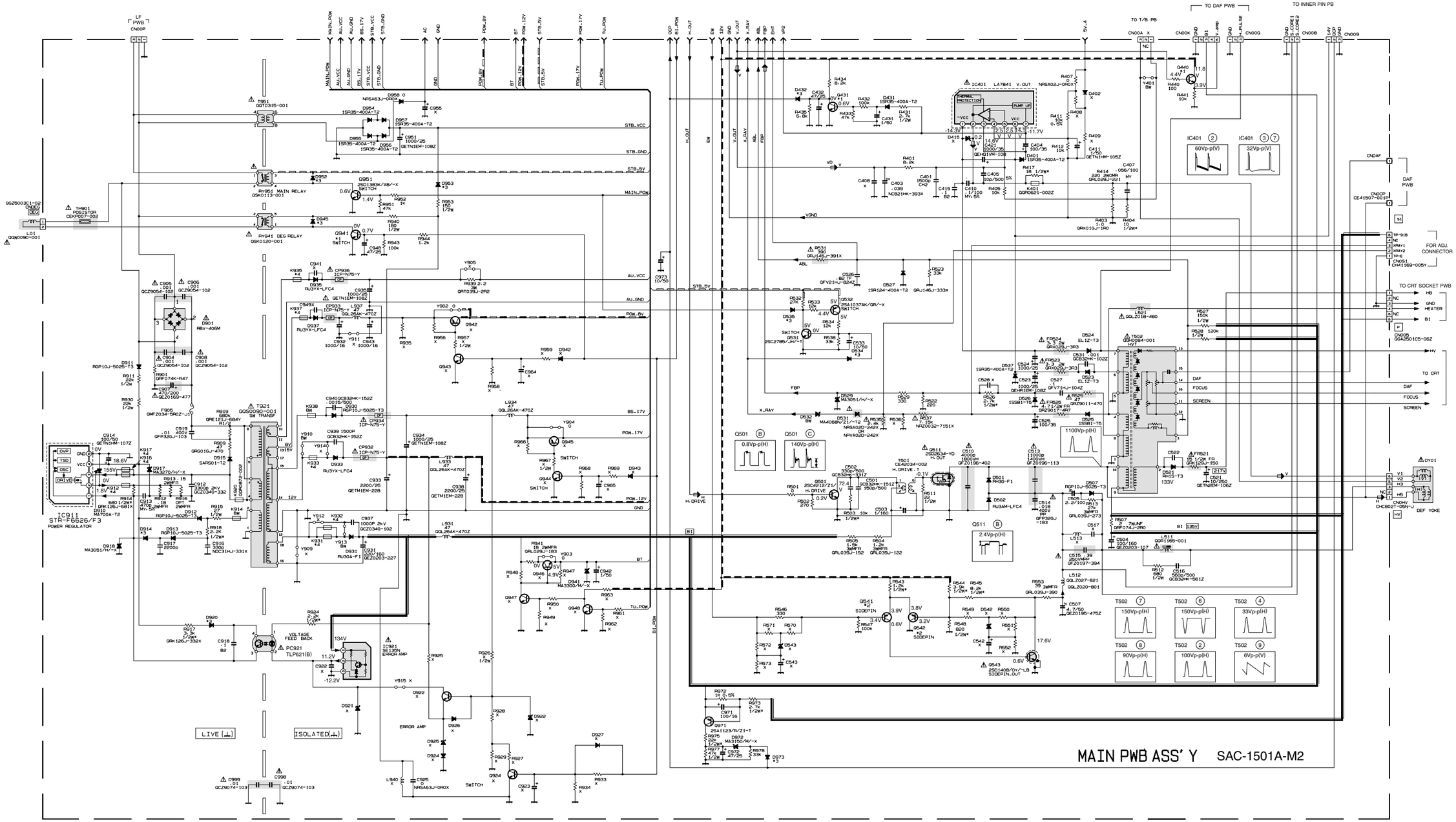


CIRCUIT DIAGRAMS

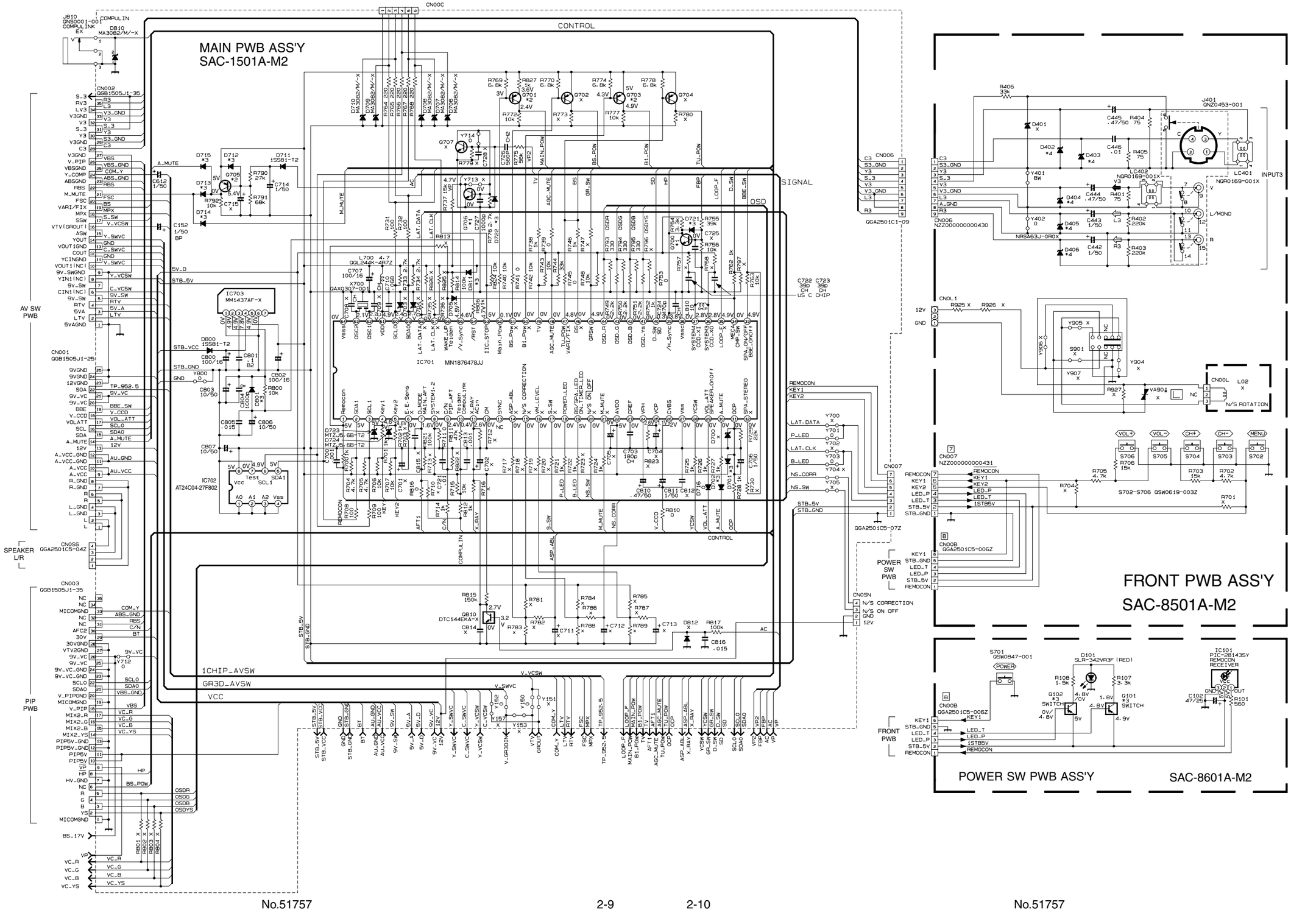
MAIN PWB CIRCUIT DIAGRAM



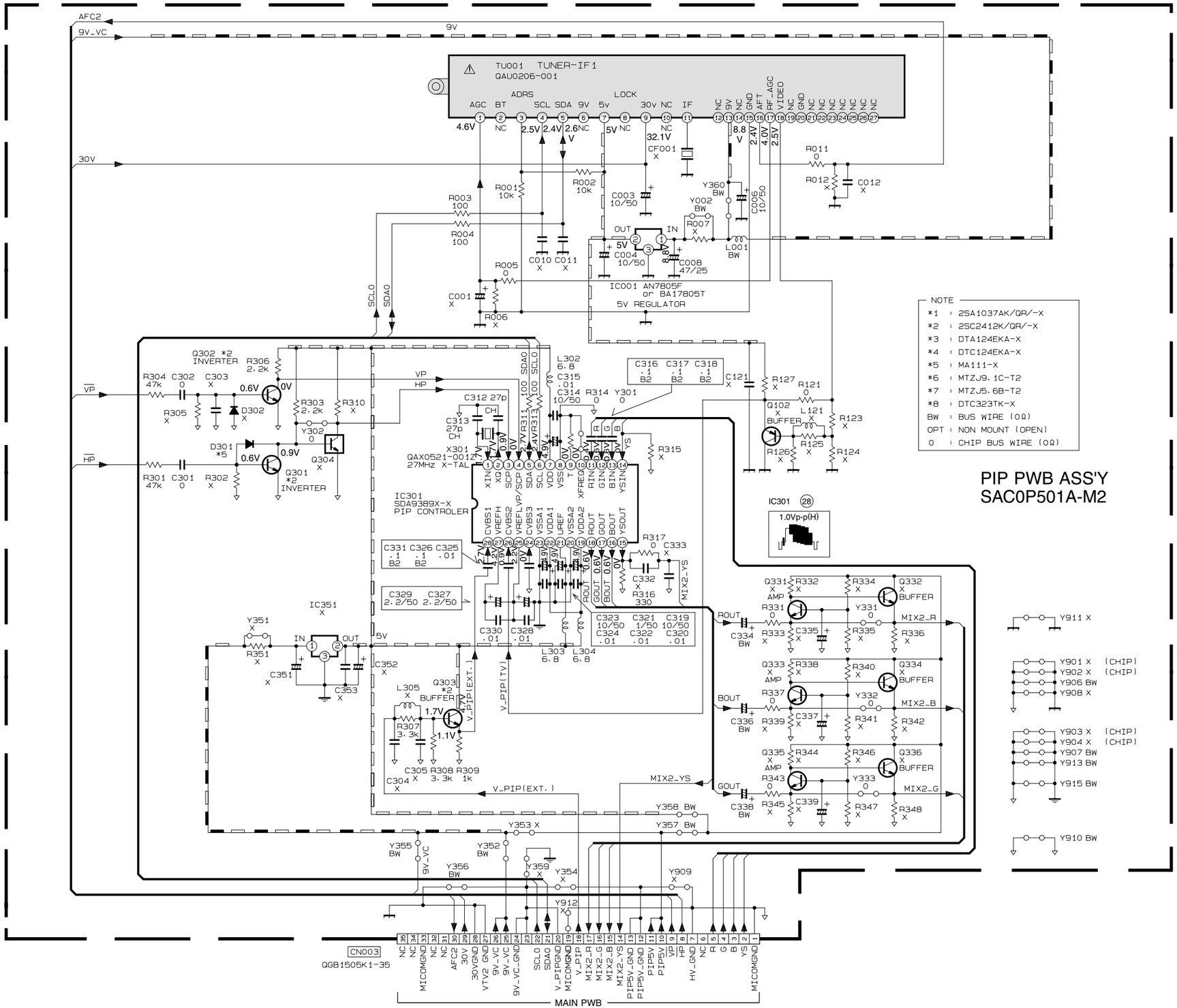
MAIN PWB CIRCUIT DIAGRAM



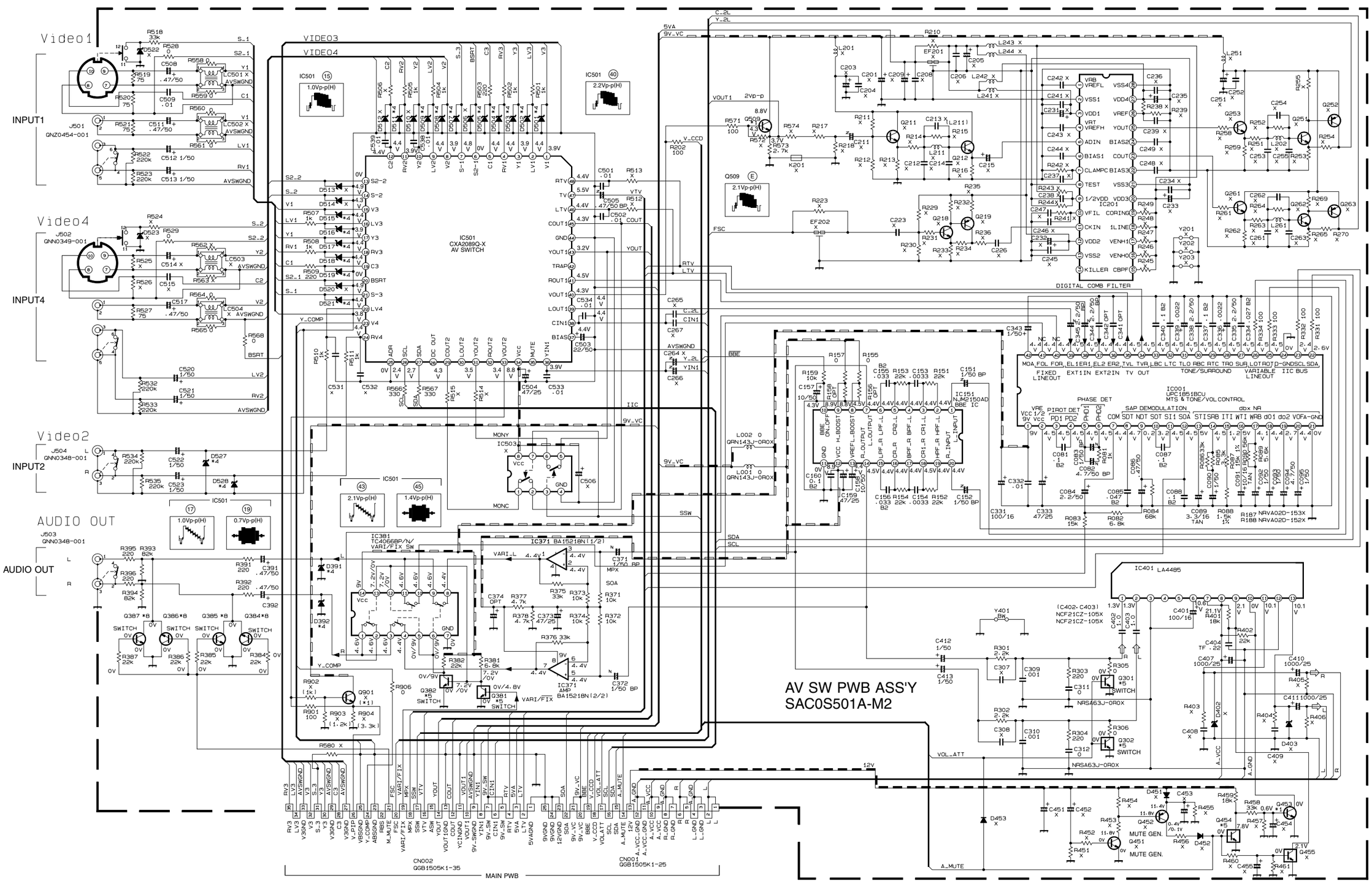
MAIN, FRONT, POWER SW PWB CIRCUIT DIAGRAMS



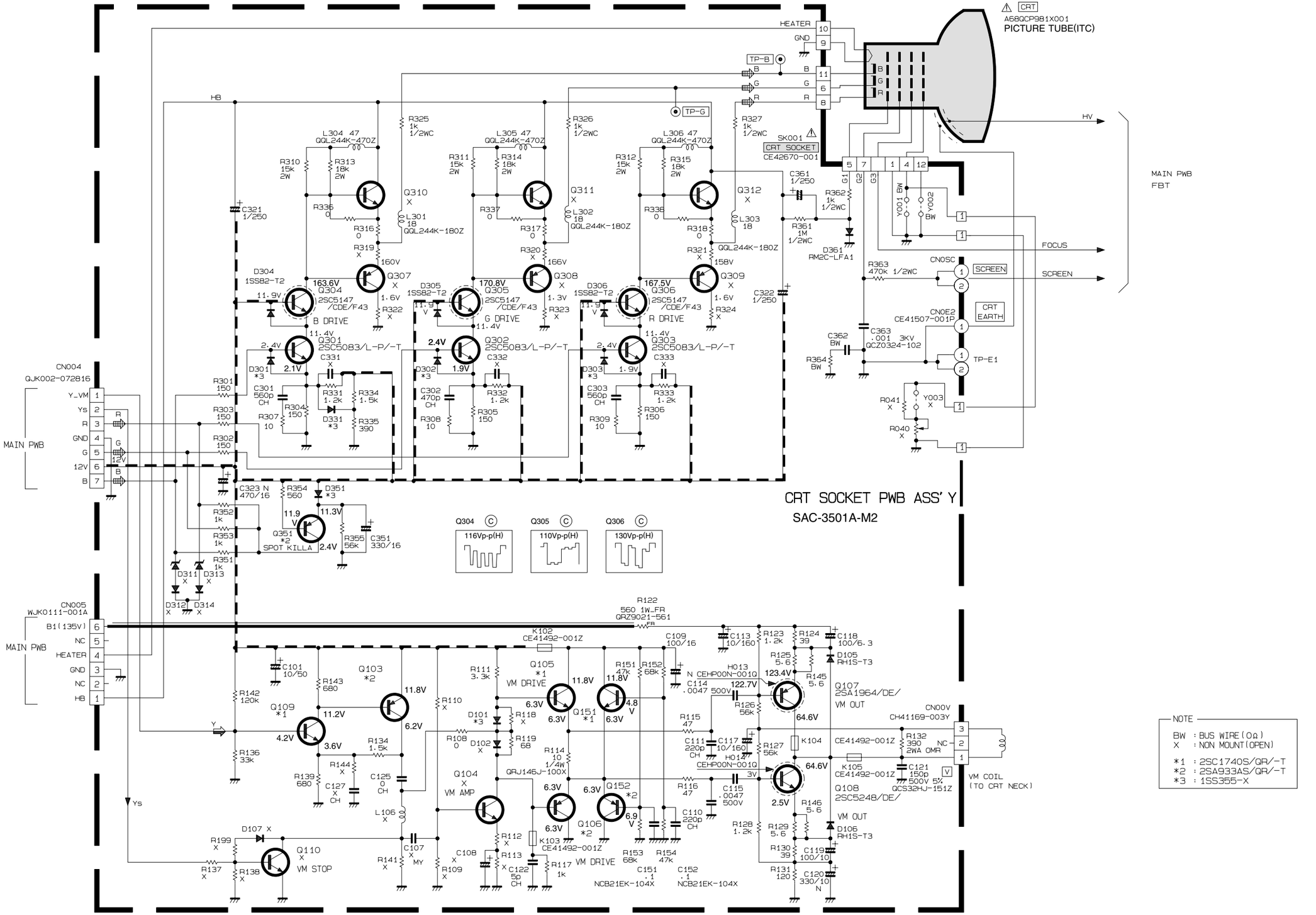
PIP PWB CIRCUIT DIAGRAM



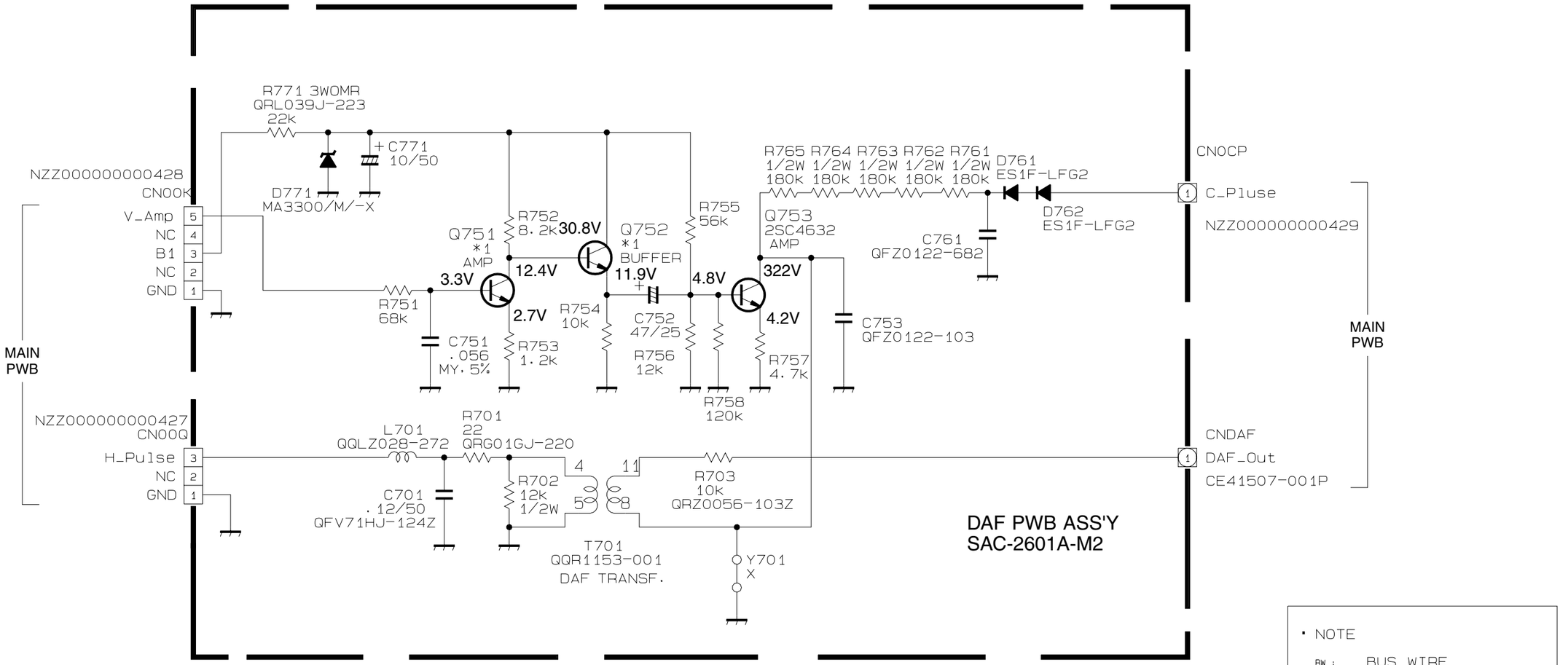
AV SW PWB CIRCUIT DIAGRAM



CRT SOCKET PWB CIRCUIT DIAGRAM



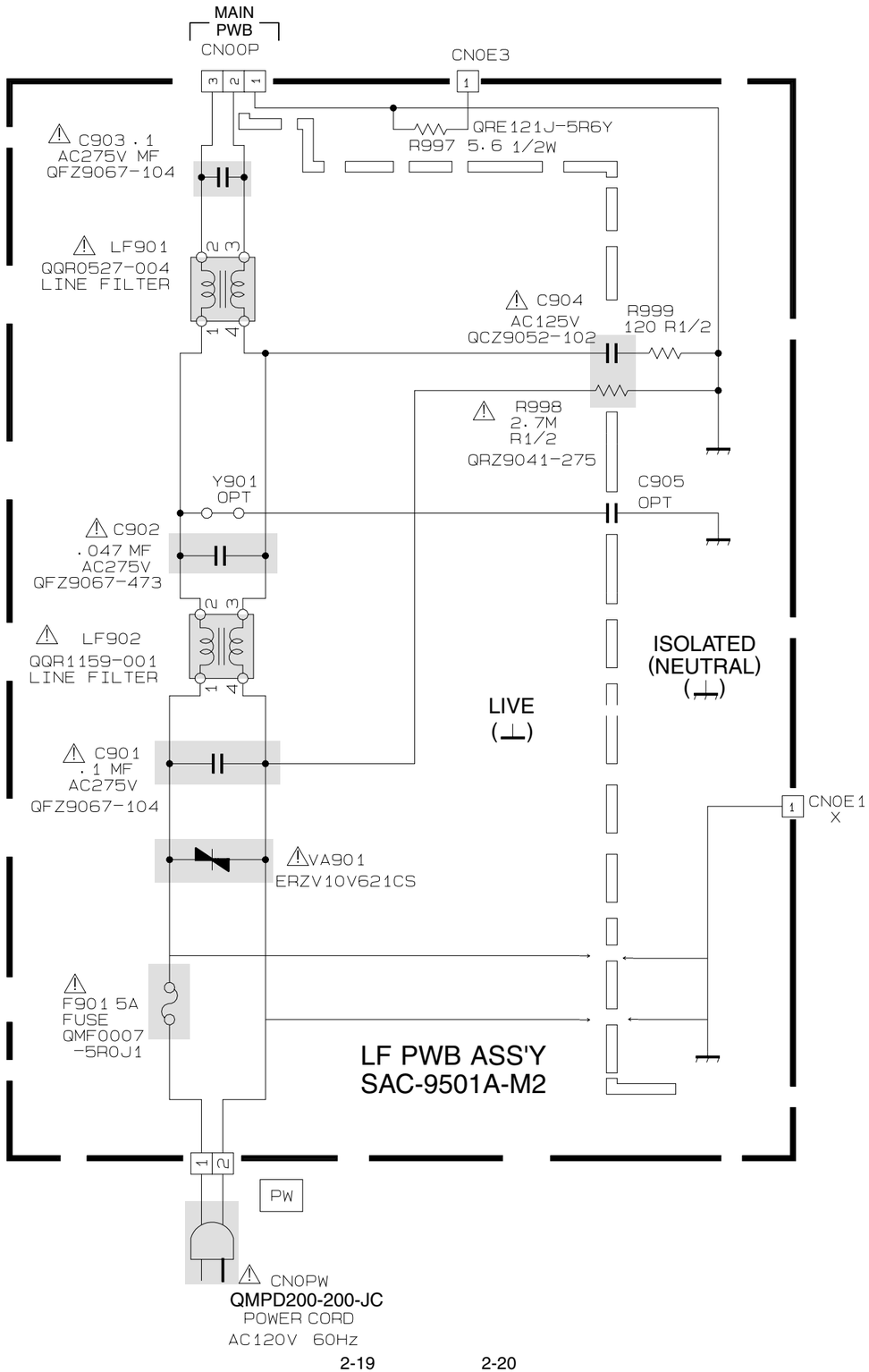
DAF PWB CIRCUIT DIAGRAM



- NOTE

BW :	BUS WIRE
X :	NON MOUNT (OPEN)
*1 :	2SC3311A/QR/-T
*2 :	2SA1309A/QR/-T
*3 :	1SS133-T2

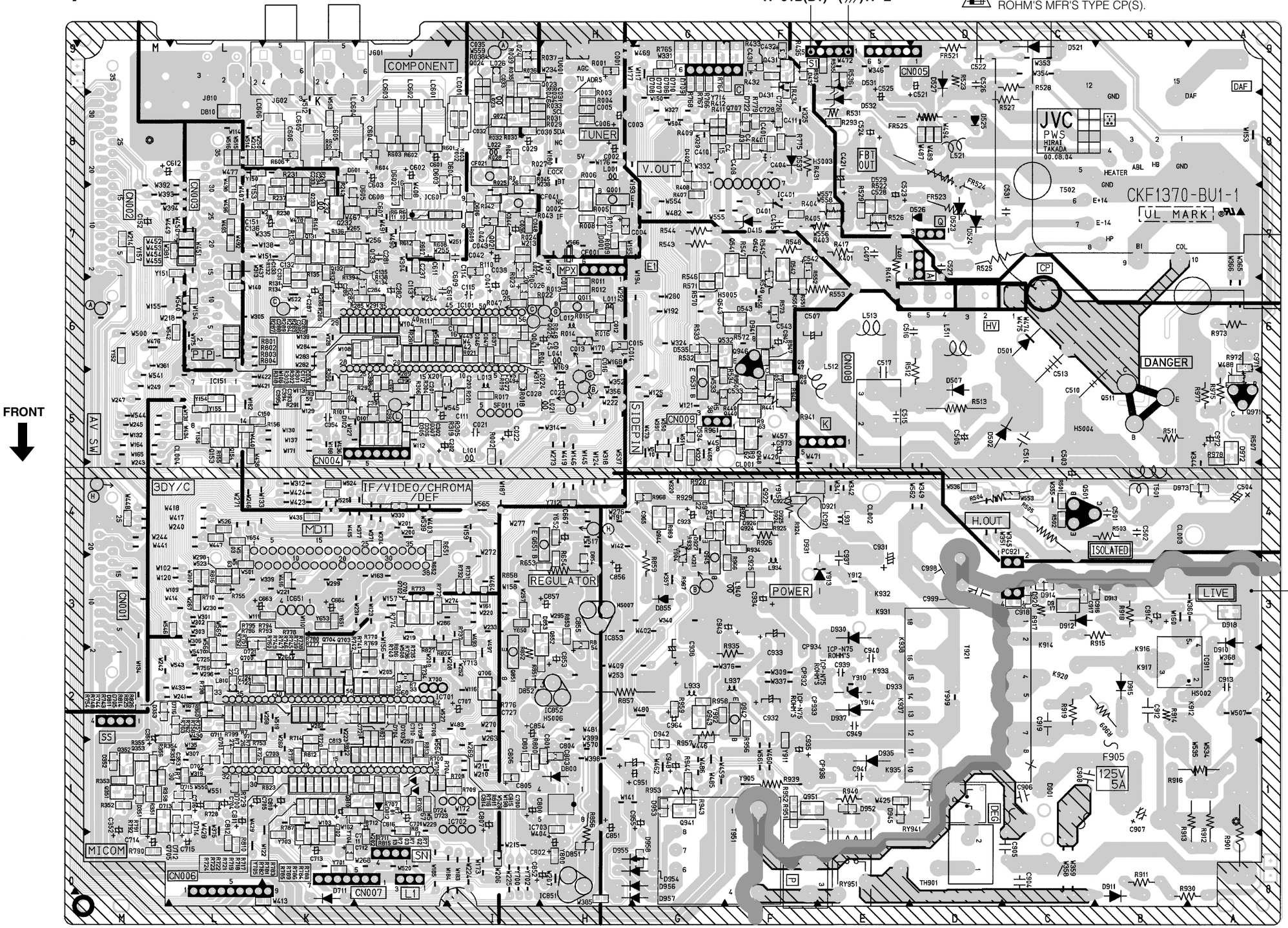
LF PWB CIRCUIT DIAGRAM



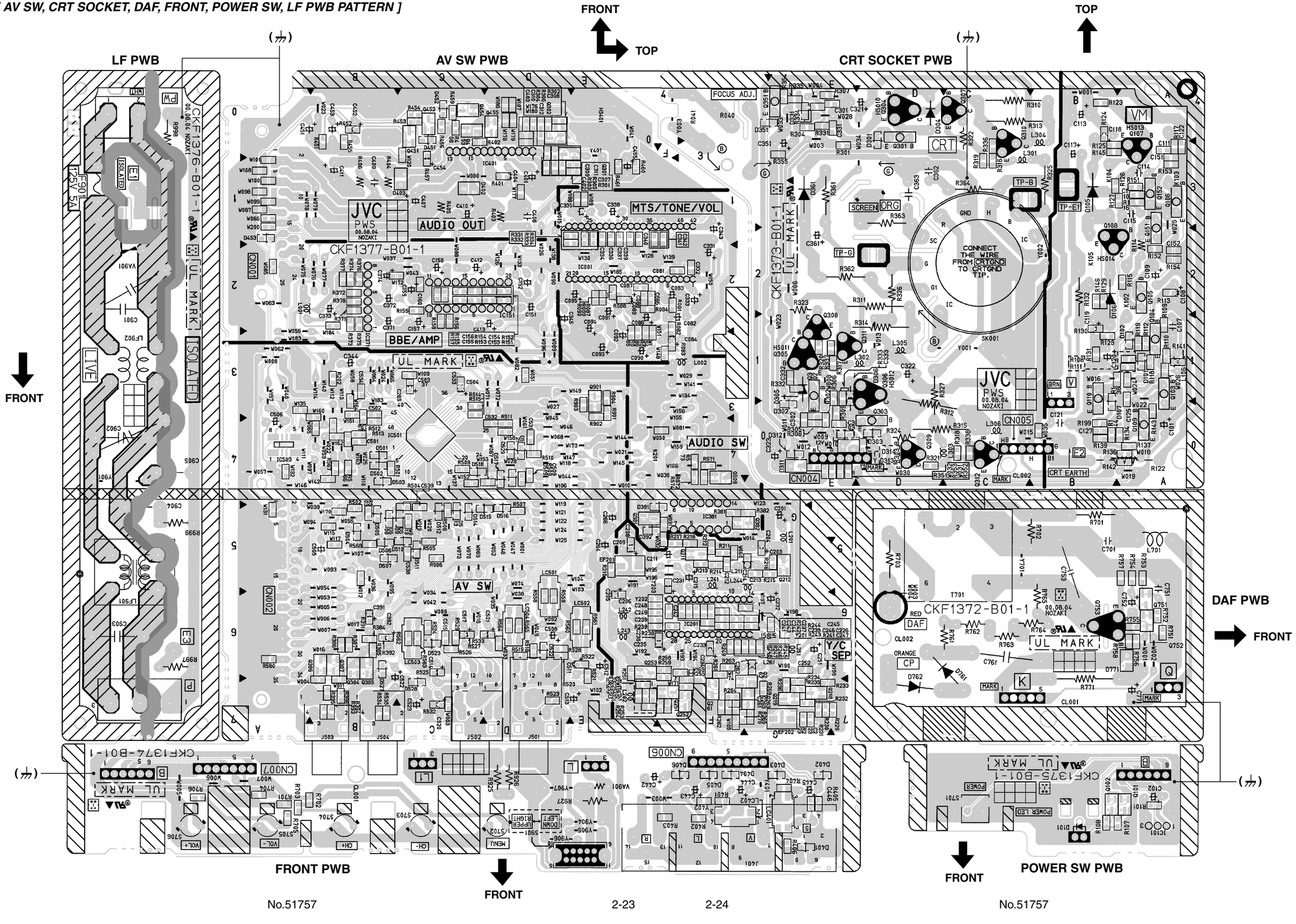
PATTERN DIAGRAMS

[MAIN PWB PATTERN]

CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH SAME TYPE AND RATED FUSE(S) AND ROHM'S MFR'S TYPE CP(S).



[AV SW, CRT SOCKET, DAF, FRONT, POWER SW, LF PWB PATTERN]



[PIP PWB PATTERN]